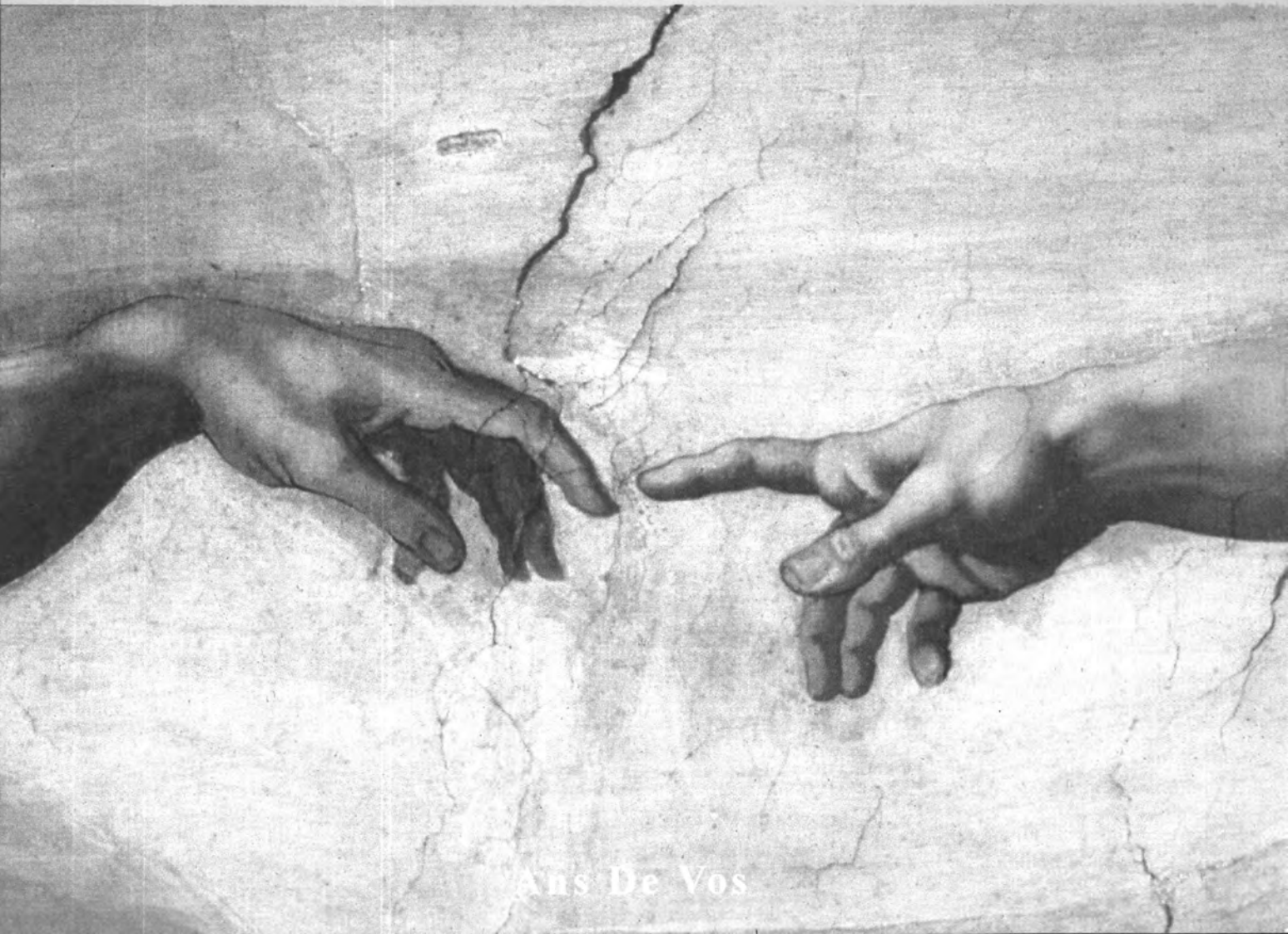
# The Individual Antecedents and the Development of Newcomers' Psychological Contracts during the Socialization Process: A Longitudinal Study



Ans De Vos

# THE INDIVIDUAL ANTECEDENTS AND THE DEVELOPMENT OF NEWCOMERS' PSYCHOLOGICAL CONTRACTS DURING THE SOCIALIZATION PROCESS: A LONGITUDINAL STUDY

**PROEFSCHRIFT**

Voorgedragen tot het behalen van de graad van
doctor in de Toegepaste Economische Wetenschappen
aan de Universiteit Gent

door

**Ans De Vos**

**PROMOTOR**

Prof. dr. Dirk Buyens (Vakgroep Management en Organisatie, FEB, Universiteit Gent)

**BEGELEIDINGSCOMMISSIE**

Prof. dr. René Schalk (Universiteit van Tilburg, Nederland)
Prof. dr. Marc Buelens (Vakgroep Management en Organisatie, FEB, Universiteit Gent)

**EXAMENCOMMISSIE**

Prof. dr. R. Pameleire (Decaan-voorzitter FEB, Universiteit Gent)
Prof. dr. M. Buelens (Vakgroep Management en Organisatie, FEB, Universiteit Gent)
Prof. dr. D. Buyens (Vakgroep Management en Organisatie, FEB, Universiteit Gent)
Prof. dr. A. Heene (Vakgroep Management en Organisatie, FEB, Universiteit Gent)
Prof. dr. M. Janssens (Faculteit Economische en Toegepaste Economische Wetenschappen, K.U.Leuven)
Prof. dr. E. Omey (Secretaris FEB, Universiteit Gent)
Prof. dr. R. Schalk (Universiteit van Tilburg, Nederland)
Prof. dr. H. Van den Broeck (Vakgroep Management en Organisatie, FEB, Universiteit Gent)
Prof. dr. R. Van Dierdonck (Vakgroep Beleidsinformatie, Operationeel Beheer en Technologiebeleid, FEB, Universiteit Gent)

**LEESCOMMISSIE**

Prof. dr. M. Buelens
Prof. dr. D. Buyens
Prof. dr. M. Janssens
Prof. dr. R. Schalk
Prof. dr. R. Van Dierdonck

**ACKNOWLEDGEMENTS**

It has been a learning experience to write this thesis, characterized by many interesting, exciting and sometimes frustrating moments. During the past three years, I have often dreamt about the moment that I would be writing this preface. Now that this moment has finally arrived, I would like to take the opportunity to thank those persons without whom I would not have been able to realize this thesis and who have made this doctoral journey worthwhile.

First of all, I would like to express my gratitude to my supervisor, Dirk Buyens, for supporting me throughout this project, for encouraging me to broaden my mind while at the same time respecting the personal choices I made. Without his inspiring support I would never have started my doctoral thesis in the first place. Although I sometimes thought that his advises would never be executable in practice (like the set up of my longitudinal study), I have learned a lot from his enthusiasm, his pragmatic advises and action-orientedness. Without him I would probably still be working on my conceptual model… The psychological contract I have with Dirk is a personal case study to me, which proves that a mutually shared psychological contract is both motivating and satisfying.

Furthermore, I am indebted to René Schalk, my tutor at Tilburg University. I sincerely appreciate his interest in my work as well as his relevant and to-the-point suggestions. It was very enriching for me to have him as a sounding board, to which I could immediately express my concerns and uncertainties related to my study. I also want to thank him for the opportunities he gave me to make contacts with other psychological contract researchers, and for keeping me informed about projects ongoing within the research field.

I would also like to thank Marc Buelens, not only for his statistical advises but certainly for his concern about my work and for reminding me of enjoying the scientific journey. I also would like to express my thanks to Herman Van den Broeck, for his concern about the process of my work and for sensing, during our short conversations in the corridor, when I was in need for some supporting words. For methodological and statistical advises I also thank Marcel Croon and Wilfried Decorte.

I owe many thanks to my colleagues at the HR-Department of the Vlerick Leuven Gent Management School for their moral support throughout my doctoral process. Although most of them started working in the department when I was already focused on my doctoral research, and working a lot at home or in Tilburg, I have never felt an outsider and coming to Vlerick was always some relief to look forward to. Thanks to my colleagues I could personally experience that the importance of a good social atmosphere at work is one of the major dimensions of the psychological contract. I really look forward to spend more time together with them from now on.

My thanks also go to my colleagues of the department of Policy and Organization Studies at Tilburg University. It was a very positive experience for me to be part of this group. I have learned a lot from being involved in a different research group and this has certainly broadened my horizons. Even though I was not really a "full member" of the department, I have always felt part of the team.

I would not have been able to complete this thesis without the financial support from the Intercollegiate Centre for Doctoral Studies in Management Science (ICM). I would therefore like to thank Dirk Symoens, the Secretary-General, and all the people who make the working of the ICM possible.

Furthermore, I want to thank all the organizations and their human resource managers for their willingness to participate in this study and for giving me the opportunity to conduct my research among their newcomers. The interest they showed in my results and the presentations I gave about my intermediate results were inspiring and it was encouraging to experience that my findings did not only have scientific value but that they were also of practical usefulness. I am also greatly indebted to all newcomers who participated in my study. I am aware of the

fact that I required a rather intense participation from them. The encouraging e-mails I received from some of them have certainly been an important motivation for me to continue with the longitudinal study at times when I wished I had never started it…

I also warmly thank my parents for stimulating my interest in learning and for enthusiastically supporting all the choices I made with respect to my studies and career over the past twelve years. A special word of thanks goes to my mother for her administrative help. This has certainly lightened the burden of filling envelopes and distributing questionnaires throughout my longitudinal research.

Finally, I want to thank Carl for his unconditional love and support. During the past years we both had our project to work on, the only difference being that his one, our new house, is much more tangible than mine. I will probably enjoy much more the results of his efforts than he will ever enjoy mine… The intensity with which we both have been working on our projects throughout the past three years has not changed the psychological contract we have together and it has stayed a very inspiring one. During the past weeks we have often laughed about the black hole that is waiting for us now that both our projects have come to an end, but I am sure we will have no problems to fill in our weekends together again and I really look forward to it.

Ans De Vos
Antwerpen, 2 September 2002

**TABLE OF CONTENTS**

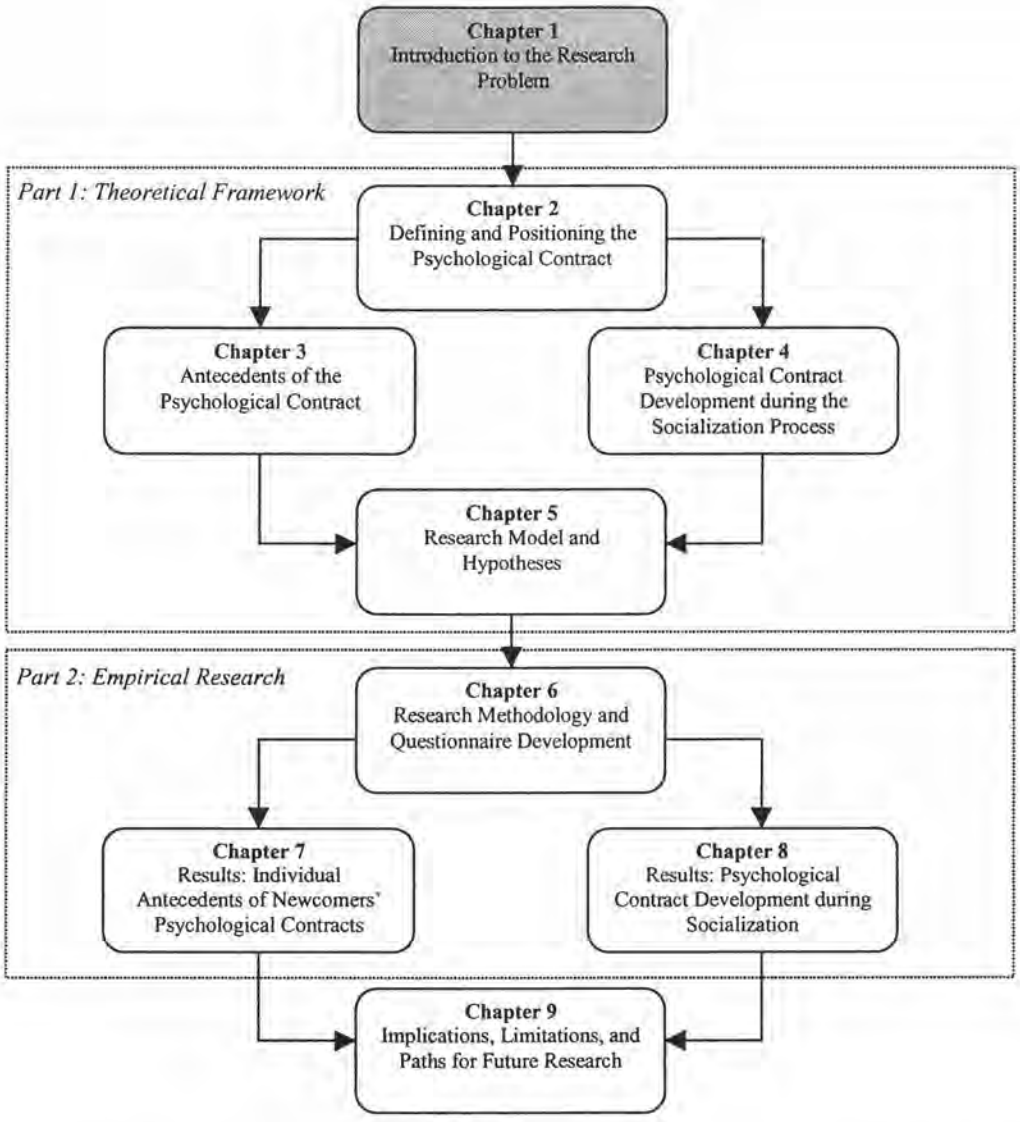
## LIST OF TABLES AND FIGURES

### List of Tables

**List of Figures**

## CHAPTER STRUCTURE

# Chapter 1
# Introduction to the Research Problem




*Many researchers argue that psychological contracts are playing an increasingly important role in helping to define and understand the contemporary employment relationship (e.g. Anderson & Schalk, 1998; Cooper, 1999; Lester & Kickul, 2001; Millward & Brewerton, 2000; Rousseau, 2001a; Schalk & Freese, 1997). For employees, the psychological contract is important since the perception of a mutually shared agreement with the organization has been found to reduce uncertainty and to enhance satisfaction and commitment (e.g. Lester, Turnley, Bloodgood & Bolino, 2002; Robinson & Rousseau, 1994; Turnley & Feldman, 2000). For employers, it is important since the psychological contract not only facilitates employee satisfaction and commitment but also, both directly and indirectly, other important work-related attitudes and behaviors like motivation, performance and turnover (e.g. Coyle-Shapiro & Kessler, 1998; Kickul, 2001b; Robinson, 1996).*

*In this chapter we first provide justifications for our research (section 1.1). Subsequently, we formulate our research questions (section 1.2) and we describe our intended research contributions (section 1.3). In section 1.4 we give an overview of the structure of this thesis.*

## 1.1. RESEARCH JUSTIFICATION

We successively outline the importance of this study (section 1.1.1) and the shortcomings characterizing the existing research on psychological contracts (section 1.1.2).

### 1.1.1. Importance

Within our contemporary economic environment employees have become a critical resource for many organizations. Technological developments and the growing importance of service industry have caused organizations to compete for employees with scarce competencies. Attracting and retaining qualified employees by fostering a positive psychological contract has become a major challenge for human resource professionals (Cooper, 1999; De Meuse, Bergmann & Lester, 2001; Herriot, Hirsch & Reilly, 1998; Lester & Kickul, 2001; Makin, Cooper & Cox, 1996; Millward & Brewerton, 2000; Rousseau, 1996; 2001a). In general, *contracts* are a central characteristic of employment relationships, establishing inducements and contributions that are basic to membership in an organization (March & Simon, 1958). *Psychological contracts* consist of individuals' beliefs regarding the terms and conditions of the exchange agreement between themselves and their organization (Rousseau, 1989). They refer to the way the employment contract is interpreted, understood and enacted by employees at the interface between themselves and their employing organization (Millward & Brewerton, 1999). Psychological contracts emerge when individuals believe that their organization has promised to provide them with certain rewards in return for the contributions that they make to the organization (Turnley & Feldman, 2000).

A growing body of literature indicates that the psychological contract is an important motivator for employees. It shows that when individuals perceive a breach of promises or a lack of reciprocity between employer and employee contributions, their motivation and commitment to the organization decrease and they become more likely to leave their jobs. A positive psychological contract, by contrast, breeds commitment, intention to remain with the organization and organizational citizenship behaviors that go beyond the formal job description (e.g. Coyle-Shapiro & Kessler, 1998; Freese, Heinen & Schalk, 1999; Kickul, 2001b; Turnley & Feldman, 1999; 2000). These research findings, which relate to the *aftermath* of the psychological contract, call for a further investigation of the process of psychological contract development and of the factors affecting its formation. As Rousseau (2001b: 538) points out: *"Research into psychological contract formation provides the opportunity to examine forces promoting mutuality, agreement and future fulfillment as well as the more dysfunctional aspects that give rise to violation. Advancing our understanding regarding the origins of agreement is fundamental to cooperative and mutually beneficial employment relations".*

Managing the psychological contract is especially important when introducing new employees in the organization (Anderson & Thomas, 1996; Rousseau, 1990). Research on the socialization of organizational newcomers has demonstrated that the first months after organizational entry are critical for the development of a positively perceived employment relationship (e.g. Anderson & Thomas, 1996; Bauer, Morrison & Callister, 1998; Saks & Ashforth, 1997a). During this period, newcomers' motivation, commitment and intended length of stay with the organization will be affected by their perceptions regarding the terms of their employment relationship and the perceived fulfillment of these terms (Robinson, Kraatz & Rousseau, 1994). However, there is still a great deal that needs to be learned about how individuals acquire, process, and utilize available information about the terms of their employment relationship (Renn & Fedor, 2001).

Consequently, the development newcomers' psychological contracts is the core topic investigated in this thesis. We take one step back in the causal sequence by examining the constructs associated with the formation of psychological contracts and by studying changes in psychological contracts during the socialization process.

### 1.1.2. Shortcomings of Existing Research

Despite the widespread attention of both academics and practitioners for the psychological contract, as to date there is a lack of knowledge about the antecedent conditions and the processes of psychological contract development. In this section we describe the conceptual and empirical shortcomings within the psychological contract literature.

#### *1.1.2.1. Conceptual Shortcomings*

First, as to date no general agreement among authors exists on a *definition* of the psychological contract (Conway, 1999; Millward & Brewerton, 2000). Moreover, even among those researchers who have adopted the definition proposed by Rousseau (1989; 1995) in her seminal work on the psychological contract, there is diversity in the *operationalizations* of this definition, more specifically regarding the promissory element proposed to be central to psychological contracts. Other shortcomings are the distinction between content and features of the psychological contract and the lack of specification as to whether the psychological contract is a holistic, unidimensional construct versus a multidimensional construct consisting of multiple dimensions of employer inducements and employee contributions.

Second, the literature on psychological contracts is characterized by a body of empirical studies on the relationship between the psychological contract and outcome variables. However, with a few exceptions (Morrison & Robinson, 1997; Rousseau, 1995; Schalk & Freese, 1997), there is a *lack of theory building* to explain these relationships. This shortcoming is even more prevalent with respect to psychological contract development. Only few researchers have attempted to develop a model of psychological contract formation including antecedent conditions (Rousseau, 1995; Shore & Tetrick, 1994) but these models have not been further investigated. Moreover, these existing models do not explicitly focus on the particular processes through which *newcomers* develop their psychological contracts.

Consequently, at the theoretical level there is a need for (1) a more precise conceptualization of the psychological contract and for (2) further theory building on psychological contract development, including antecedent conditions and outcomes.

#### *1.1.2.2. Empirical Shortcomings*

First, the body of research on the consequences of the psychological contract sharply contrasts with the lack of *research on its antecedents* (Coyle-Shapiro, 2000; Millward & Brewerton, 2000; Rousseau, 2001b).

Second, the focus of existing research has generally been restricted to perceived employer obligations, although *reciprocity between employer and employee obligations* is said to be a defining element of the psychological contract (Coyle-Shapiro & Kessler, 2000a; Millward & Brewerton, 2000; Rousseau, 1995).

Third, although researchers agree that the psychological contract is dynamic and that it reflects an ongoing exchange process, as to date only a few studies have looked at the psychological contract as it *unfolds over time*, taking into account individual and contextual factors that may influence its development (Robinson, 1995; Robinson & Rousseau, 1994; Turnley & Feldman, 1998).

Therefore, at the empirical level there is a need for investigation of (1) psychological contract development and (2) the antecedents of the psychological contract, thereby taking into account the element of reciprocity between employer and employee obligations. Longitudinal research designs are needed to capture the dynamic aspect of psychological contracts.

## 1.2. RESEARCH QUESTIONS

Building on the arguments and the shortcomings described in the previous sections, the general research problem we address in this thesis is the following:

***What are the individual antecedents of newcomers' psychological contracts and how does the psychological contract of newcomers develop during the socialization process?"***

We address the origins of the psychological contract by focusing on newcomers entering a new employment relationship and by studying changes in their psychological contracts occurring during the first year after organizational entry. This period corresponds with what researchers have defined as the socialization period (Bauer *et al.*, 1998; Fisher, 1986; Saks & Ashforth, 1997a). Two more specific research questions will guide the exploration of this research problem. These research questions form the building blocks of this thesis.

First, given the subjective nature of the psychological contract, it is especially important to develop more knowledge about the ***individual characteristics*** that influence how newcomers perceive the terms of their employment relationship. Therefore the first research question relates to the individual antecedents of the psychological contract.

***Research Question 1:*** *What is the relationship between newcomers' individual characteristics and the content and features of their psychological contracts at organizational entry?*

We will further elaborate on this research question in Chapter 3.

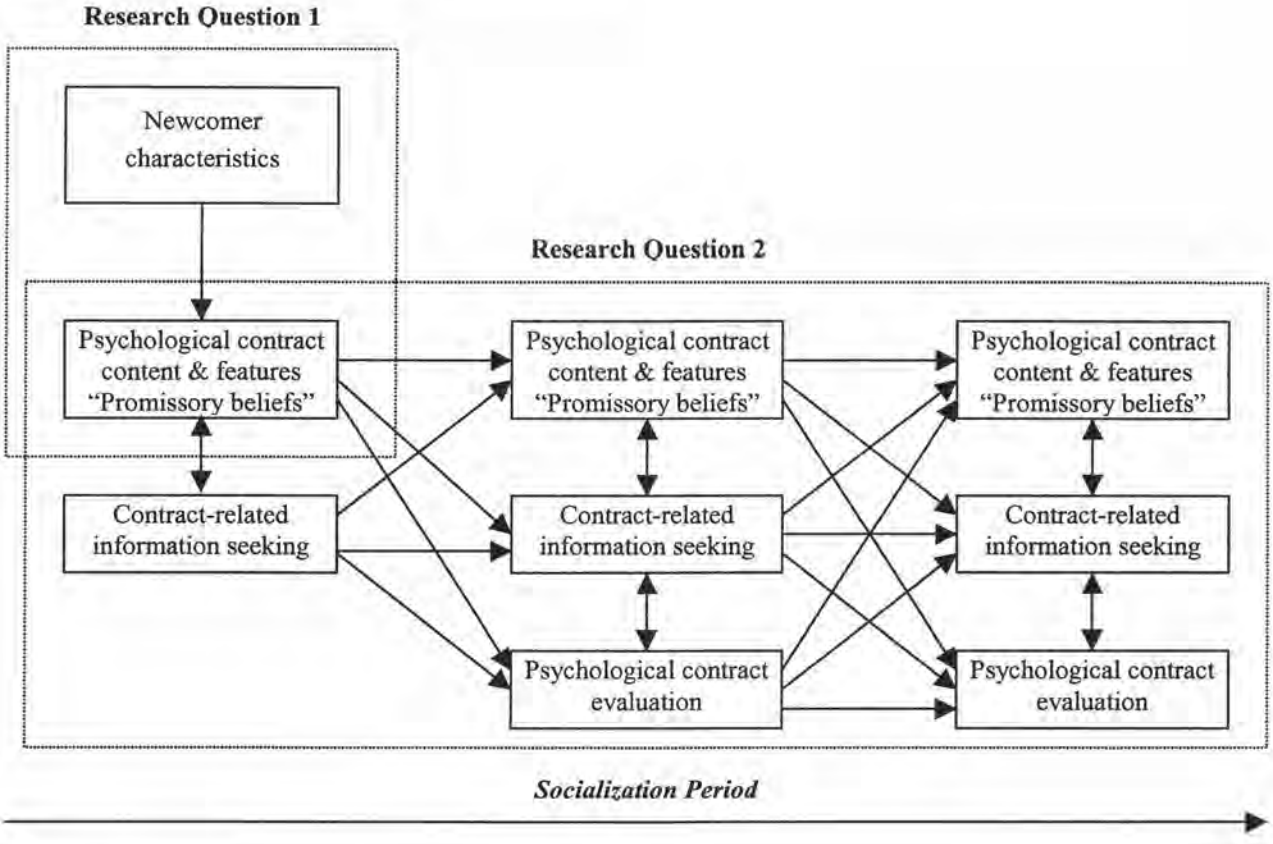
Second, we want to obtain a better insight in the ***process*** of psychological contract formation, i.e. how employees develop their perceptions and evaluations of what they have to contribute to the organization and what they expect to receive from the organization in return and how this process is related to their proactive behaviors.

***Research Question 2:*** *How does the psychological contract of newcomers develop during the socialization process?*

We will study psychological contract development with respect to changes in perceived promises, in psychological contract evaluations and in contract-related information seeking. The theoretical insights related to this research question will be further elaborated in Chapter 4.

While the first question is more static in that it addresses the role of stable individual characteristics in affecting newcomers' initial perceptions of the terms of their employment relationship, the second question is dynamic since it explicitly focuses on changes in psychological contract variables over time. In Figure 1.1 we schematically represent the main elements of both research questions. Answering our research questions requires a longitudinal study. In Chapter 6 we will further elaborate on the choices we have made with respect to the longitudinal research design.

Figure 1.1: Schematic Overview of Research Questions




## 1.3. INTENDED RESEARCH CONTRIBUTIONS

In this section we describe our intended research contributions. We discern a number of scientific contributions (section 1.3.1) as well as managerial contributions (section 1.3.2).

### 1.3.1. Scientific Contributions

First we summarize the intended conceptual contributions (section 1.3.1.1), followed by the intended methodological (section 1.3.1.2) and empirical contributions (section 1.3.1.3) of our study.

#### *1.3.1.1. Conceptual Contributions*

With this doctoral research project we want to provide a solid and integrated *theoretical foundation of the antecedents and the development of organizational newcomers' psychological contracts*. First, this study provides a critical examination and an integration of existing definitions of the psychological contract and it explicitly takes into account the element of reciprocity inherent in the psychological contract. Second, it relates the psychological contract literature to more fundamental and long-standing research traditions that provide relevant theoretical input for improving our understanding of the psychological contract. This theoretical embeddedness is scarce in many studies on the psychological contract. Considering the relatively young research tradition, it is important to relate psychological contract research to theories and insights developed within other, more elaborated research traditions.

#### *1.3.1.2. Methodological Contributions*

First, the major methodological contribution of this study is the use of a *five-wave longitudinal research design*. Previous studies investigating the psychological contract have focused almost exclusively on a relatively static

and simple cause-effect relationship between the evaluation of psychological contract fulfillment and work-related outcome variables. Although some authors have studied the psychological contract within a longitudinal research design, they have not specifically addressed the processes underlying its development (Conway & Briner, 2002). Our research aims at filling this gap by using a longitudinal research design involving a close follow-up of newcomers entering the organization. Hereby we explicitly incorporate the *process*-oriented view on the psychological contract.

Second, in our operationalization of the psychological contract we have incorporated the *three facets* of the psychological contract, i.e. content, features and evaluation. As to date most existing studies only focus on one of these facets. Together with the use of a longitudinal research design this makes it possible to investigate how promissory beliefs are related to the evaluation of psychological contract fulfillment over time. Third, based on our review of existing measurements and two pilot studies we have developed a *multidimensional psychological contract measure*, which assesses both employee contributions and employer inducements.

#### *1.3.1.3. Empirical Contributions*

This study makes an empirical contribution by *investigating the individual antecedents of newcomers' psychological contracts and the process of psychological contract development during the socialization process.* We assess the impact of four types of individual antecedents on newcomers' initial psychological contract perceptions at organizational entry. With respect to the process of psychological contract development, we assess changes in newcomers' psychological contracts over time and we relate these changes to newcomers' contract-related information seeking behaviors.

### 1.3.2. Managerial Contributions

Fostering a positive psychological contract with its employees is of utmost importance for employers considering their employees as a valuable and strategic resource. Recent studies show that the costs of replacing employees are about fifty to sixty percent of an employee's annual salary (Mitchell, Holton & Lee, 2001). Even in times of economic downturn, it is therefore important for employers to understand and actively manage employees' psychological contract perceptions.

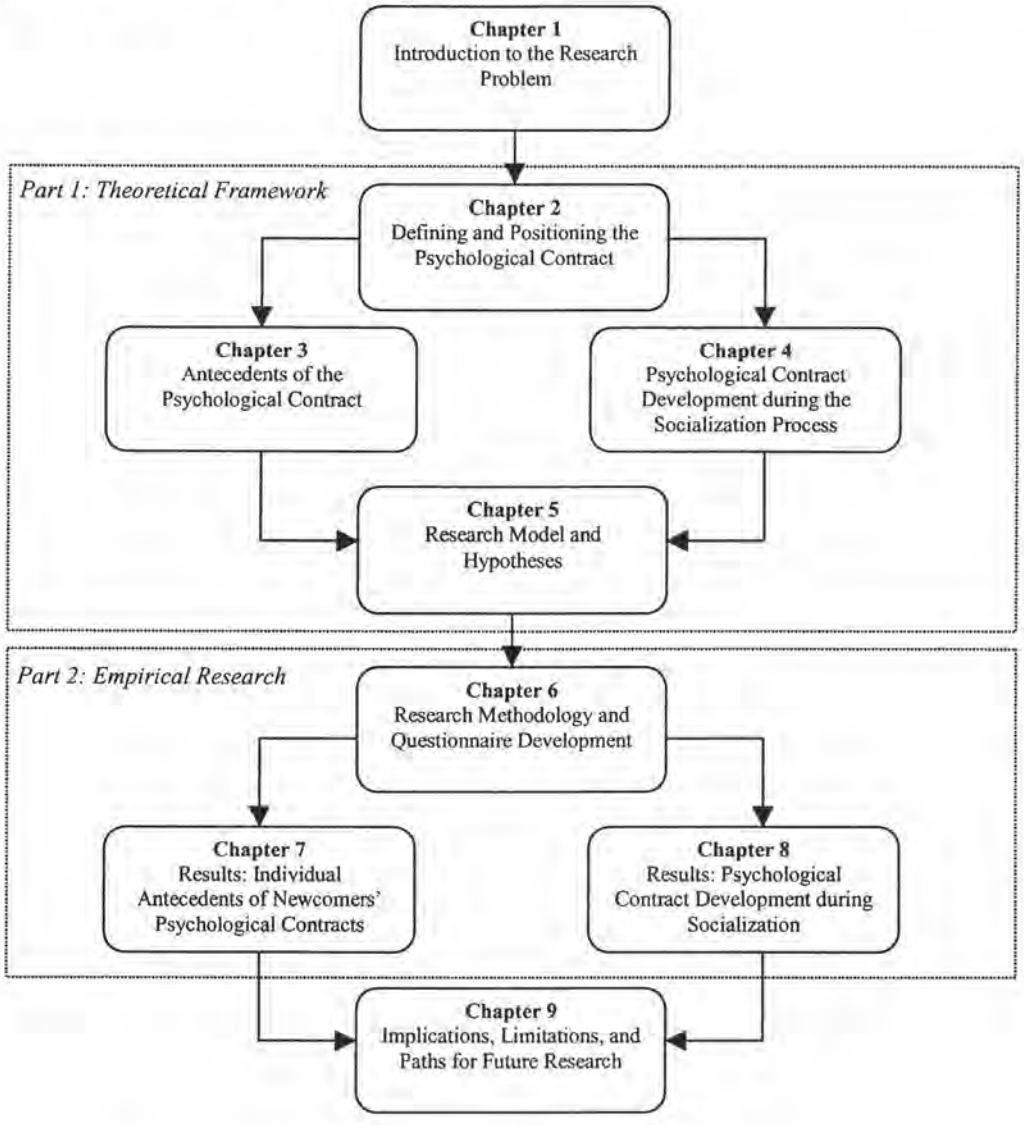
The socialization of newcomers is an important period during which the foundations of the psychological contract are established. Hence, more understanding is needed of the process of psychological contract development during this period, as well as individual factors that are related with it. In times when employment relationships are becoming more individualized, knowing the impact of individual factors on newcomers' initial perceptions of the terms of their employment relationship is important for human resources managers to take these into account in communications and negotiations about the employment deal (Rousseau, 2001a). Knowing how these initial perceptions change during the socialization period and how these changes are related to newcomers' proactive behaviors and to their intermediate evaluations of psychological contract fulfillment makes it possible for human resources managers to fine-tune their efforts aimed at enhancing a good integration of newcomers.

Together, the results of our study can provide employers with relevant guidelines for improving the creation of a positive and mutually-understood psychological contract with their employees. This, in turn, should have a positive impact on organization-relevant employee attitudes and behaviors (e.g. commitment, organizational citizenship behavior, performance) and should decrease the likelihood of voluntary employee turnover.

## 1.4. Structure of the Thesis

We have represented the structure of this thesis in Figure 1.2. In the first part we describe the theoretical framework based on which our research questions and research model are developed. In the second part we describe the methodology and the results our empirical study.

Figure 1.2: Structure of the Thesis




In *Chapter 2* we elaborate on the definition of the psychological contract and we provide a summary of the research on the relationship between the psychological contract and employee attitudes and behaviors. In this chapter we also position the psychological contract within a number of more long-standing research traditions, i.e. economic transaction theories, social exchange theories, social-cognitive theories and career development theories. In *Chapter 3* we further elaborate on the theoretical and empirical information about the antecedents of the psychological contract, thereby taking into account antecedents situated at three levels (societal, organizational, individual). After a summary of the available evidence on societal and organizational antecedents, we discuss in more detail the individual antecedents, since these are the major focus of our research. Given the shortage of theoretical and empirical evidence on the impact of individual antecedents, this review is based on related research traditions that have addressed the role of individual dispositions in the workplace. We discuss four groups of individual antecedents: (1) work values, (2) career strategy, (3) locus of control, and (4) exchange orientation. *Chapter 4* further explores the process of newcomer psychological contract development during the socialization period. We do this by situating the psychological contract within socialization research. The major research themes and empirical findings from socialization research are reviewed and psychological contract development is subsequently discussed in light of this evidence. Specific attention is paid to the role of newcomer proactivity and information seeking. In *Chapter 5* we present the hypotheses we have formulated

based on our review of the literature and the insights presented in the previous chapters. These hypotheses successively address our two major research questions (i.e. the individual antecedents of the psychological contract and the process of psychological contract development during organizational socialization).

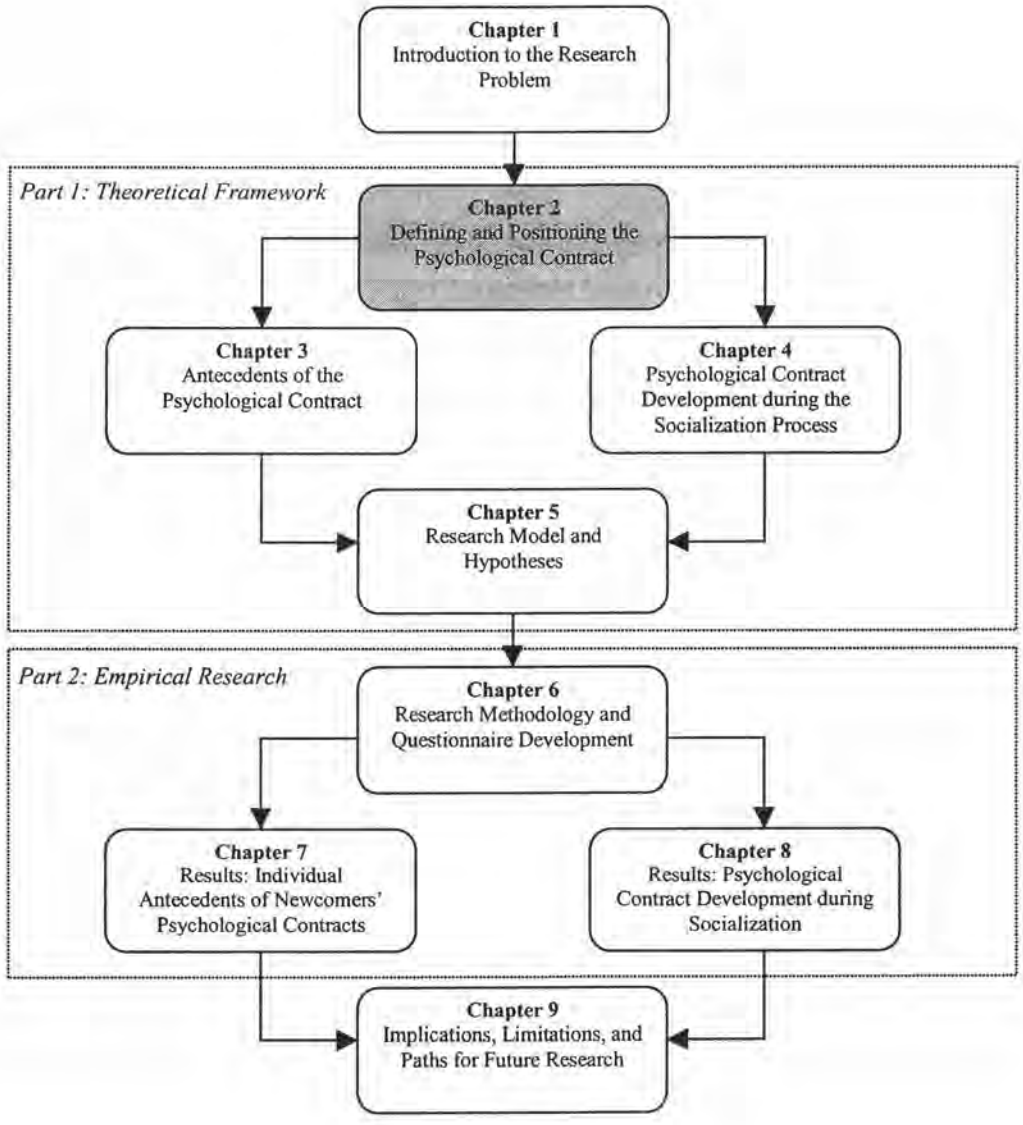
In the second part we present the outline and results of our empirical research and we discuss our findings in view of our hypotheses. In *Chapter 6* we describe the methodology we have used to investigate our research questions. We elaborate on the longitudinal research design we have used, on the measures we have selected or developed and on the analytical choices we have made to analyze our findings. *Chapter 7* contains the results with respect to the first research question, i.e. the individual antecedents of newcomers' psychological contracts. These results are discussed in view of the proposed hypotheses. *Chapter 8* contains the results with respect to the second research question, i.e. psychological contract development during organizational socialization. We discuss our findings about changes in psychological contract variables over time, about the interplay between perceptions and evaluations of the psychological contract over time, and about the relationship between contract-related information seeking and psychological contract perceptions and evaluations.

Finally, in *Chapter 9* we discuss the scientific and managerial implications of the empirical findings presented in the previous two chapters as well as the unanswered questions and shortcomings to be addressed in future research.

# PART 1
# THEORETICAL FRAMEWORK

**CHAPTER STRUCTURE**

# Chapter 2
# Defining and Positioning the Psychological Contract




*In this chapter the psychological contract is introduced as a construct relevant for understanding and explaining the employment relationship. We begin by briefly discussing the employment contract as a construct linking the individual and the organization in a mutual exchange relationship (section 2.1). Subsequently, we give an overview of and we comment on existing definitions of the psychological contract and we present the definition we will use in the remainder of this thesis (section 2.2). In this section we also discuss the psychological contract as a multi-faceted construct. This is followed by a summary of research findings on the relationship between the psychological contract and work-related attitudes and behaviors (section 2.3). Next, we discuss the theoretical backgrounds that are relevant for understanding the psychological contract construct (section 2.4). In the final section we summarize the main points of this chapter (section 2.5).*

## 2.1. EMPLOYMENT CONTRACTS

Contracts are fundamental to the behaviors of individuals and the actions of organizations. They imply consensus and cooperation, but often engender dispute and disagreement (Rousseau & McLean Parks, 1993). The employment contract is basic to organizational membership in that it constitutes a fundamental characteristic of employment relationships, establishing an exchange of promises and contributions between two parties: employer and employee (Millward & Brewerton, 2000; Rousseau, 1989).

Rousseau (1995) defines an employment contract as:

> *An exchange agreement between an employee and an employer. The contract may include written terms, orally communicated terms, as well as other expressions of commitment and future intent* (Rousseau, 1995: 2-3).

Kallenberg & Reve (1996: 1104) define employment contracts as *"bilateral arrangements between employers and employees that involve reciprocal expectations and behaviors"*. Contracts project future exchange into the present, as each party seeks to satisfy its needs and wants by trading something of value to the other: employers exchange inducements to employees in return for their contributions. The notion of contracts encompasses the salient features of employment relations, including how work is organized, governed, evaluated and rewarded.

These definitions of employment contracts indicate that contracts in organizations are fundamentally *mixed-level* phenomena: constructions created of individual cognitions and organizational context (Rousseau & McLean Parks, 1993). Contracts can both create the contexts of work and be shaped by them. Rousseau & McLean Parks (1993) indicate that as interactions of person and context, contracts offer organizational scholars a link between micro and macro modes of organization and work.

Whilst the employment contract can be viewed from many perspectives – psychological, political, economic, organizational, sociological, and legal – none of these provides a complete picture (Millward & Brewerton, 2000). In this thesis we are concerned with what Rousseau (1995) calls the *organizational, social and psychological meaning of contracts*. We focus on the individual psychological processes that inform us about how people make, sustain, and fulfill contracts and we will discuss the organizational forces that help us to understand contract functions and their context.

## 2.2. PSYCHOLOGICAL CONTRACTS

In this section we first discuss the definition of the psychological contract (section 2.2.1). This is followed by a description of the psychological contract as a multi-faceted construct (section 2.2.2). In section 2.2.3 some conclusions about the conceptualization of the psychological contract are drawn.

### 2.2.1. Definitions of the Psychological Contract

It has long been recognized that subjectivity is inherent in all contracts (Rousseau, 1989). MacNeil (1985) considers all contracts as fundamentally psychological since all agreements between people are subject to interpretation. Subjectivity concerns the way the employment contract is interpreted, understood and enacted on a daily basis as employees interface with their workplace (Millward & Brewerton, 2000). The assumption of subjectivity is central in all definitions of the psychological contract. We successively provide an overview of existing definitions (section 2.2.1.1), we compare and integrate these definitions (section 2.2.1.2) and we draw some conclusions based upon this comparison (we 2.2.1.3).

#### *2.2.1.1. Overview of Existing Definitions*

Argyris (1960) first used the term "psychological contract " and Levinson *et al.* (1962), Schein (1965; 1980) and Rousseau (1989; 1995) have further developed it.

Argyris (1960) used the construct of psychological contracts to describe the relationship between employees and their organization and the relative impact both parties have on one another. He was the first to undertake a formal study of the subjective aspects of contracts. He defines the construct at the level of the exchange relationship between employees and their leader and describes it as an implicit, underwritten agreement between both parties to respect each other's norms.

> *The psychological contract simplifies the employee-foreman relationship. Since the foremen realize the employees will produce optimally under passive leadership, and since the employees agree, a relationship may be hypothesized to evolve between the employees and the foremen which might be called the psychological work contract* (Argyris, 1960: 95).

Argyris gives no formal definition of the construct. His general description of the psychological contract has been further developed by Levinson *et al.* (1962), who define it as follows:

> *The psychological or unwritten contract is a product of mutual expectations, which have two characteristics: 1) they are largely implicit and unspoken, and 2) they frequently antedate the relationship of person and company* (Levinson *et al.*, 1962: 22).

According to Levinson *et al.* the mutuality of both parties' expectations must be understood as the way in which the contract is affirmed, altered, or denied in day-to-day work experiences within the organization.

Schein's (1965; 1980) definition of the psychological contract is closely related to the definition provided by Levinson *et al.* (1962):

> *The notion of a psychological contract implies that there is a set of expectations operating at all times between every member of an organization and the various managers and others in that organization* (Schein, 1980: 22).

Schein (1980) focuses upon the interaction between individual and organization and on the importance of *matching* both parties' expectations. He argues that the commitment and productivity of employees will depend on the degree to which their expectations of what the organization provides to them and what they owe the organization in return matches with the organization's expectations of what it will give and receive in return. He also stresses the dynamic nature of psychological contracts: they evolve throughout the course of an individual's career (Schein, 1978). This notion of the psychological contract is followed by Farnwsorth (1982), who used it to denote issues of exchange and of mutual expectation in the link between employees and their employing organization. Kotter (1973) used Schein's (1965) definition to describe newcomers' expectations of what they have to contribute and what they are entitled to receive when they join an organization. The organization also has expectations of what it will receive from the new employee and what it will offer him or her in return. This set of employer and employee expectations and the match or mismatch between them constitutes a psychological contract. In accordance with Schein, Kotter (1973) also stresses the dynamic nature of the construct: the psychological contract will change as the employee's and/or the organization's expectations alter during the course of their employment relationship.

The definitions discussed so far assume that the psychological contract exists at the level of the interaction between the parties to the contract. In order to investigate the psychological contract, researchers postulated that

both parties' expectations have to be examined and their common elements have to be determined. However, little formal research has been undertaken at this stage. The psychological contract was used mainly as a framework (rather than a scientific construct) in which to talk about what is implicit to the exchange relationship between employee and employer (Millward & Brewerton, 2000). Since the 1990s, the psychological contract has acquired construct status and in doing so it has taken a major conceptual and empirical turn that was initiated by the seminal work of Rousseau (1989; 1995).

Rousseau (1989) introduced a more narrow definition of the psychological contract. She conceptualizes the psychological contract at the *level of the individual* (an individual employee or an agent representing the organization) and defined it as a *cognitive-perceptual entity*.

> *The psychological contract is an individual's belief in the terms and conditions of a reciprocal exchange agreement between the focal person and another party. A psychological contract emerges when one party believes that a promise of future returns has been made, a contribution has been given and thus, an obligation has been created to provide future benefits* (Rousseau, 1989: 123).

This definition presumes five basic assumptions (Rousseau, 1989; 1995):

1. The psychological contract is a ***subjective perception.*** It is a mental model of the employment relationship, consisting of an individual's beliefs in the existence of an exchange agreement. This belief is unilateral, held by a particular individual and it does not constrain those of any other parties to the relationship. Thus, a psychological contract is idiosyncratic and unique to each individual. (Ho, 1999; McLean Parks, Kidder & Gallagher, 1998; Robinson, 1996; Rousseau, 1989; 1995; Schalk & Freese, 1997). This means that the construct is defined phenomenologically. It is a perceptual cognition.

2. The psychological contract contains an individual's beliefs regarding the ***mutual obligations of both parties to the relationship.*** However, the terms each party understands and agrees to do not have to be mutual. Different parties can have different interpretations of terms. Essential to the existence of a psychological contract, however, is that in each individual's psychological contract there is a *perception of reciprocity and mutuality*. Real mutuality is not a necessary condition (Coyle-Shapiro & Kessler, 1998; Rousseau, 1995; 2001b).

3. Beliefs entailed in an individual's psychological contract result from ***perceived promises***. Beliefs formed in the context of a psychological contract entail a special subset of expectations based on one party conveying a promise to another. The perceiver is conceived as an active constructor of reality. Beliefs become contractual when the individual believes that he or she owes the other party certain contributions (e.g. hard work, loyalty, sacrifices) in return for certain inducements (e.g. high pay, job security, promotion). As such, promise-based beliefs entailed in the psychological contract have to be differentiated from mere expectations individuals have regarding the employment relationship (Robinson, 1996).

4. Certain factors promote the individual's belief that a contract exists: overt promises, written statements, oral discussions, organizational actions, or observation of treatment received by other employees. Rousseau (1995) refers to these as ***administrative and human contract makers***. The organization provides the context within which an individual's psychological contract will develop (Rousseau & Greller, 1994).

5. Psychological contracts can be described in terms of their ***content, evaluation and features*** as well as in terms of the ***processes*** by which they develop and evolve over time. Researchers agree that the psychological contract is ***dynamic*** in nature and that it develops within the context of an on-going interaction between the focal individual and his or her employing organization (Conway & Briner, 2002; Herriot, Hirsch & Reilly, 1998; Schein, 1978; Shore & Tetrick, 1994).

Within the contemporary literature on the psychological contract, the definition introduced by Rousseau (1989) is being followed by a majority of scholars in the field (e.g.Coyle-Shapiro & Kessler, 1998; Lester *et al.*, 2002; Kickul, 2001a; 2001b; Schalk & Freese, 1997; Millward & Hopkins, 1998; Shore & Tetrick, 1994; Turnley & Feldman, 2000).

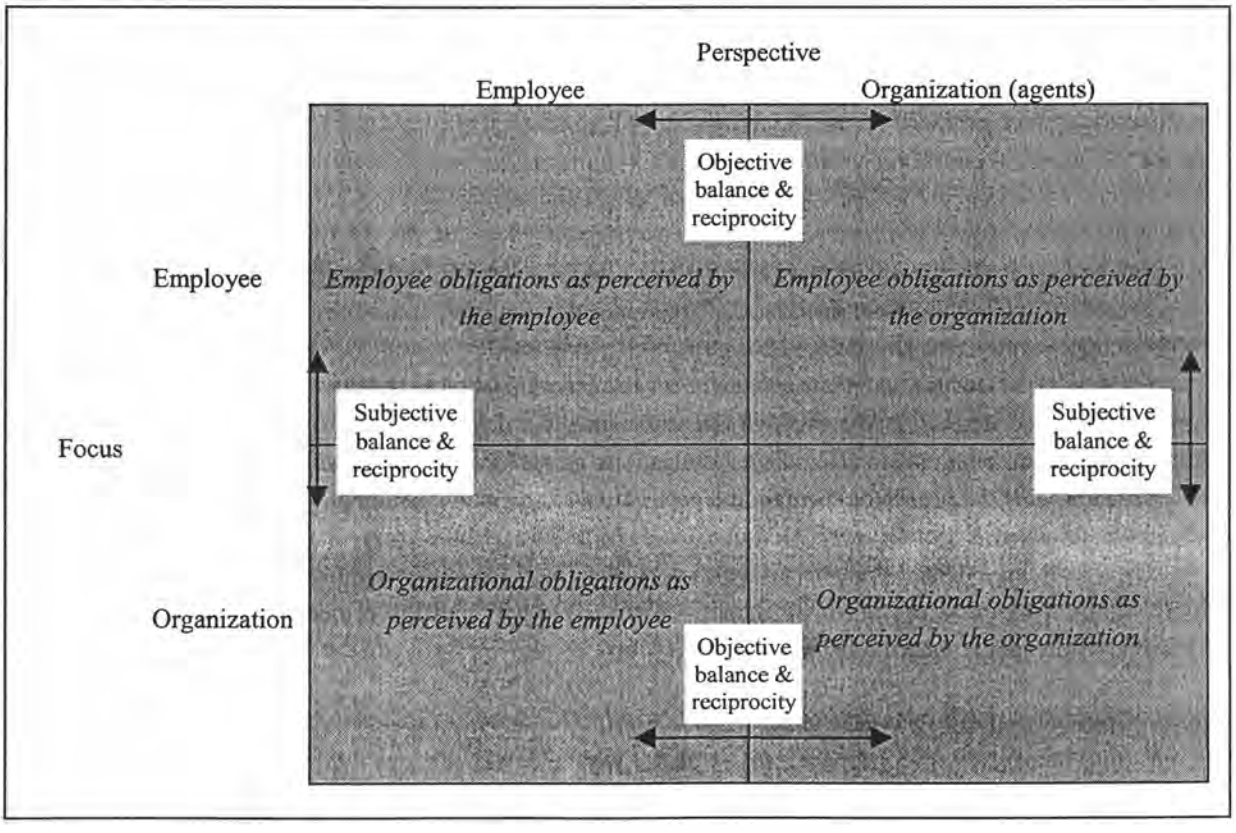
However, not all contemporary scholars agree with this definition, in which the psychological contract is situated at the level of the individual employee or agent representing the organization. Instead, some authors focus on the more dynamic and relational aspects of the interface between individuals and organization (Guest, 1998a; 1998b; Herriot, Hirsch & Reilly, 1998; Herriot, Manning & Kidd, 1997; Herriot & Pemberton, 1997; Martin, Staines & Pate, 1998). These authors define the psychological contract at the level of the interaction between the individual and the organization. In this sense their definition is more closely related to the earlier definitions of the psychological contract provided by Levinson *et al.* (1962) and Schein (1965; 1980).

> *The psychological contract is concerned with the interaction between one specific and another nebulous party. The contract resides in the interaction rather than in the individual or in the organization. It cannot be found exclusively either in the subject or in the object of the interaction* (Guest, 1998a: 650).

#### *2.2.1.2. Comparison and Integration of Existing Definitions*

Based on our review of the literature we conclude that both groups of scholars stress the existence of an exchange relationship between an individual employee and his or her organization, but that they conceptualize it at different levels. We have represented this difference in conceptualizations in Figure 2.1.

Figure 2.1: Comparison and Integration of Definitions of the Psychological Contract



Definition at the Level of the Interaction

In the original definition put forward by Argyris (1960), Levinson *et al.* (1962), and Schein (1965; 1980), the psychological contract is conceptualized at the ***level of the interaction*** between the employee and the organization (as a whole or represented by organizational agents). This perspective is represented by the horizontal arrows in Figure 2.1. Within this conceptual framework, both the employee's and the organization's perspective upon the psychological contract need to be investigated in order to determine the degree of fit, congruence or "match" between both parties' perspectives. The focus can be on the employee's obligations, the organization's obligations, or both. This conceptualization has been further developed by Herriot and his colleagues (Herriot, Hirsch & Reilly, 1998; Herriot, Manning & Kidd, 1997; Herriot & Pemberton, 1996; 1997). It comes close to what Weick (1981) has called an *implicit contract* or Rousseau's (1989) definition of an *implied contract*: a mutual obligation existing at the level of the relationship. Implied contracts are patterns of obligations arising from interactions between parties (e.g., individuals and organizations) that become part of the social structure of which the relationship is a part (Rousseau & Anton, 1988; 1991; Rousseau & Aquino, 1993).

Within this framework, research focuses upon the *negotiation process* between both parties to the contract and the ways in which reciprocal expectations are made explicit (e.g. Herriot *et al.*, 1998; Herriot & Pemberton, 1996; Martin, Staines & Pate, 1998; Schein, 1978), as well as on the *degree of congruence* between both parties' perceptions *and its impact on outcome variables*. For example, Lewis-McLear & Taylor (1997) conducted a study in which they showed that the degree of discrepancy between employees' and supervisors' perceptions of organizational obligations was positively related to supervisors' perceptions of psychological contract violation by the employees. In a comparable study, Porter *et al.* (1998) found that the larger the gap between employees' and organizations' perceptions of inducements offered to the employees, the lower employees' satisfaction with their organization. Other studies have compared both parties' views on the psychological contract without relating differences in views to outcome variables. For example, in a recent study Lester *et al.* (2002) found that subordinates and supervisors had different perceptions of the extent to which the organization violated its obligations and that they gave different reasons for breach. Subordinates were more likely to attribute breach to the organization's intentions, while supervisors were more inclined to attribute breach to situations beyond the organization's direct control. Coyle-Shapiro & Kessler (2000c) have examined the perceptions of both employees and managers with regard to the existence of psychological contract breach. These authors found that both parties agreed that the organization was not fulfilling its obligations to employees to the extent that it could. They conclude that both parties' perspectives are strikingly similar.

Definition at the Level of the Individual

The vertical arrows in the model in Figure 2.1 represent the definition introduced by Rousseau (1989; 1995), who has conceptualized the psychological contract as a mental model existing at the ***level of the individual***. It is the individual's perspective upon the employee's and/or organization's obligations that is the central focus. Social exchange is defined in the mind of the individual: the degree of balance in the reciprocal exchange agreement between employee and employer obligations as perceived by the individual. While a majority of research within this tradition focuses upon the perspective of the individual employee (e.g. Freese *et al.*, 1999; Ho, 1999; Robinson & Rousseau, 1994; Robinson & Morrison, 1995; Turnley & Feldman, 1999), only a few researchers have investigated the perspective of organizational agents (Coyle-Shapiro & Kessler, 1998; 2000c; Guest & Conway, 2002; Hallier & James, 1998). We will further elaborate on studies using this conceptualization in the subsequent sections.

Comparison: Internal and External Career

To integrate both types of conceptualizations of the psychological contract we can draw a parallel with the distinction made in *career literature* between *the internal and the external career* (Derr & Laurent, 1989; Stephens, 1994). The *internal or subjective career* is characterized by individuals' personal perceptions and subjective evaluations of their careers. These subjective experiences reflect changing aspirations, satisfactions, self-conceptions, and attitudes toward work, which develop within the context of organizations and occupations.

The *external or objective career* on the other hand, is defined as the more or less tangible indicators of a career like constraints and actual job sequences. The core of the external career is the individual's perception of the organizational and occupational context itself. It is located at the interface between the person and his or her work environment. Derr & Laurent (1989) stress the importance of delineating both concepts, since they are two important but conceptually distinct foci of career dynamics. In a related sense, both perspectives upon the psychological contract are relevant. We will come back to the distinction between internal and external career in section 2.4.4.1.

Common Problem to both Conceptualizations: Who Represents the Employer?

A conceptual problem that arises when studying the employer's perspective on the psychological contract is the decision about who should represent the employer. Most studies that have investigated the employer's perspective have considered managers as the key contract makers who are in a position to report on the employer's perspective. But there are differences with respect to the *types of managers* selected. While Porter et al. (1998) used top managers, Coyle-Shapiro & Kessler (1998) included both top and middle managers and they excluded team managers and supervisors. Both studies have aggregated managerial views, thereby hiding potentially divergent views across different management levels. Guest & Conway (2000; 2002) included senior human resource practitioners in their sample, while Herriot *et al.* (1997) assessed the perspective of managers at different levels. These latter two studies did not explicitly compare managers' perspectives with the view of employees, making the problem of aggregation less prevalent than when managers' and employees' views are confronted. Other scholars used dyads of employees and their direct supervisors (Lester, *et al.*, 2002; Lewis-McLear & Taylor, 1997). Together the different types of organizational agents used to represent the employer make comparisons of studies impossible.

In addition to the selection of relevant organizational representatives, Coyle-Shapiro (2000) also mentions the problem that the *vision of managers might be biased* by their personal level of commitment to the organization. Highly committed managers may be more likely to evaluate the degree to which the organization is fulfilling its obligations in a more positive light. Another issue is the *referent employee* managers have in mind when giving their opinion on the psychological contract. Do they think of a typical employee or of employees in general? These issues indicate that a better understanding is needed of how managers interpret the employer's obligations and inducements and the factors affecting these interpretations.

Finally, in order to decide upon who best represents the employer, it is needed to further investigate *who is considered to represent the organization by the employees*. Case studies conducted by Guest & Conway (2000; 2002) suggest that employees differ in this respect. Most refer to senior or line managers rather than to their direct supervisor. They conclude that the perceived organization depends on an individual's hierarchical position and on the extent to which they consider a particular manager as someone who is able to make things happen.

#### *2.2.1.3. Conclusion*

Although the discussion on the conceptualization of the psychological contract is still on-going within the contemporary literature, we argue that both types of conceptualizations – at the level of the individual or at the level of the interaction – are closely linked, since *both refer to the subjective nature of the employment relationship*. However, the distinction between both is crucial with reference to research issues and it is important not to confuse both viewpoints. The major difficulty lies within the psychological contract conceptualized at the level of the interaction between parties. Although this perspective is said to represent more "objective" work realities, it remains highly subjective and difficult to investigate empirically (Anderson & Schalk, 1998; Millward & Brewerton, 2000).

In what follows *our main focus will be on the conceptualization of the psychological contract at the level of the individual*. In line with the majority of contemporary scholars in the field, we agree with the proposition

introduced by Rousseau (1989) that the most significant aspect of the psychological contract is *the individual's perception of the terms of his or her employment relationship*. It is the meaning the individual attributes to the employment relationship that is the central focus of the psychological contract. Therefore, we conceive the psychological contract as a cognitive-perceptual entity, or a mental model representing the employment relationship. Both individual employees and organizational agents (e.g. line managers or human resource representatives) can be asked to describe their perception of the reciprocal terms of the employment relationship. However, we do acknowledge the importance of the organization as the context in which the psychological contract of individual employees or organizational agents develops.

In what follows, we will define a psychological contract as:

> *An individual's perception of the terms and conditions of his or her reciprocal exchange agreement with the organization. This perception is based upon promises, which develop within the broader context of the organization and which give rise to expectations about what the individual is obligated to give to and entitled to receive from the organization.*

This definition is based on Rousseau (1989; 1995) and it is the definition that is followed by the majority of scholars in the psychological contract field. In the subsequent section we depart from this definition to further elaborate on the meaning of the psychological contract as a multi-faceted construct.

### 2.2.2. The Psychological Contract as a Multi-Faceted Construct

Existing theoretical and empirical work on psychological contracts reveals that the construct has been operationalized and assessed in distinct ways. Rousseau & Tijoriwala (1998) outline three types of perspectives that can be used to study the psychological contract, thereby conceiving it as a multi-faceted construct. In this section we successively discuss these three distinct facets of the psychological contract, namely *content* (section 2.2.2.1), *features* (section 2.2.2.2), and *evaluation* (section 2.2.2.3).

#### *2.2.2.1. Content of the Psychological Contract*

The content of the psychological contract refers to the *concrete terms being part of the perceived exchange relationship* (Rousseau & Tijoriwala, 1998). It encompasses an employee's perception of the contributions he or she feels obligated to make to the organization and the inducements he or she believes the organization is obligated to provide in return. Theoretically, the psychological contract could contain potentially thousands of items. Empirically, researchers have restricted their investigations of the content of the psychological contract to a limited subset for which they have developed scales that can be used as more stable, generalizable measures of discrete contract terms across populations or over time. However, as to date no generally agreed-upon scales have been developed to measure the psychological contract content. Also, while most studies focus on perceived employer inducements, only a very small number of studies also considers perceived employee contributions. An extensive summary of operationalizations used by psychological contract researchers is presented in Appendix 2.1. Here we summarize our findings and we draw some major conclusions. First, we elaborate on the promissory element within the psychological contract, which distinguishes the construct from related constructs. Subsequently, we describe the psychological contract content and typologies used to categorize content elements.

Centrality of the Promissory Element in the Psychological Contract

While all definitions of the psychological contract discussed in the previous section use the term "beliefs" or "perceptions" to stress the perceptual nature of the construct, there is disagreement as to whether these beliefs refer to promises, obligations or expectations. Earlier definitions of the psychological contract referred to expectations (e.g. Kotter, 1973; Levinson *et al.*, 1962; Schein, 1978), but most later definitions emphasize

promises and obligations (e.g. Coyle-Shapiro & Kessler, 2000c; Rousseau, 1989; 1995). According to Robinson & Rousseau (1994) the psychological contract is different from mere expectations since *the psychological contract, unlike expectations, entails a belief in what the employer is obligated to provide, **based on perceived promises** about reciprocal exchange*. Rousseau & McLean Parks (1993) stress that while all promises involve expectations, expectations do not necessarily involve a promissory element. This means that only those employee expectations that arise from perceived implicit or explicit promises lie in the conceptualization of the psychological contract. The same argument holds for obligations, or normative expectations about what should be provided. Morrison & Robinson (1997) stress that only those perceived obligations that are accompanied by the belief that a promise has been conveyed fall within the psychological contract. This implies that measurements of an employee's expectations about inducements and contributions or an employee's perceptions of what he or she should receive and contribute, without reference to perceived promises, are not considered as operationalizations of the psychological contract.

While this differentiation may sound straightforward theoretically, many studies have used operationalizations that should not be categorized as measurements of the psychological contract according to the criteria listed by Rousseau and her colleagues. Summarizing the instructions used to measure the psychological contract content reviewed in Appendix 2.1, we conclude that a few authors have operationalized the psychological contract as *mere expectations* about inducements or contributions (Thomas & Anderson, 1998; Tinsley & Lee, 1999). Several others have measured employees' perceptions of what their employer *should* or *is obligated* to offer them and what they should or feel obligated to contribute, thereby including a more normative element but without reference to promises or commitments made (e.g. Coyle-Shapiro, 2001b; Coyle-Shapiro & Kessler, 1998; 2000c; Freese & Schalk, 1996; Shore & Barksdale, 1998). In one the studies they have conducted themselves, Rousseau and her colleagues have also skipped the promissory element (Robinson *et al.*, 1994; Rousseau, 1990). In other studies scholars do use the promissory element in formulating their instructions (e.g. Guest & Conway, 2002; Kickul, 2001a; 2001b; Robinson, 1996; Robinson & Morrison, 1995; Rousseau & Tijoriwala, 1999).

This diversity in approaches to measure the psychological contract content is confusing. Although all these studies proclaim to assess the psychological contract, detailed comparison of the instructions shows many different operationalizations, making it difficult to compare the obtained results. In order to attain a broader consensus on the promissory element in the psychological contract, further clarification of criteria is needed. Only in this way the research domain will be able to differentiate itself from related research traditions like the met-expectations literature, and to theoretically explain findings on the relationship between the psychological contract and outcome variables in terms of the distinct nature of the promissory element within the psychological contract. For example, if Rousseau's more restrictive definition holds, then the relationship between the psychological contract and outcomes found in studies using operationalizations in terms of promise-based expectations or obligations should be stronger or different compared to studies using an operationalization in terms of mere expectations or perceived obligations. However, no meta-analytic reviews exists to clarify this and in view of the different populations and measures used by psychological contract researchers it is difficult to compare the magnitude of relationships found in existing studies.

Descriptions of the Content of the Psychological Contract

In one of the first empirical studies on the psychological contract, Rousseau (1990) based her selection of employer inducements and employee contributions on interviews with managers about the kinds of commitments they sought from new hires during the selection process and the promises their firms made to these new hires. Employer obligations that came out of these interviews included promotion, high pay, pay based on current level of performance, training, long-term job security, career development, and support with personal problems. Employee obligations included working extra hours, loyalty, volunteering to do non-required tasks on the job, advance notice if taking a job elsewhere, willingness to accept a transfer, refusal to support the employer's competitors, protection of proprietary information, and spending a minimum of two years in the organization. In

specifying the range of content elements of the psychological contract, many researchers draw on the elements originally outlined by Rousseau (1990) but most scholars have added items to the original list, or have changed the wording of some items, thereby making comparisons between studies difficult (e.g. Coyle-Shapiro & Kessler, 2001c; Freese & Schalk, 1999; Kickul, 2001a, 2001b).

Herriot *et al.* (1997) have conducted an extensive study on the contents of the psychological contract using the critical incident technique. They explored the perspectives of employers and employees representing a cross-section of the working population in Britain. Managers were used to represent the employer perspective. They asked both groups of respondents for occasions where the organization or the employee had fallen short of or had exceeded their expectations. The incidents reported were clustered together using a thematic content analysis. This analysis resulted in seven categories of employer obligations and twelve categories of employee obligations that were mentioned by both groups of respondents (employees and managers). The value of this approach is that both employees and managers, who belong to the target group in psychological contract research, could freely report their answers, instead of reacting to a restricted number of pre-determined items. Unfortunately, the results of this study have not been used as a basis to develop scales in subsequent studies on psychological contracts. What is important to note about this study, however, is that Herriot *et al.* focus on perceived deviations from what each party might *reasonably expect* from the other, without reference to promises. Furthermore, as Conway (1999) has argued, Herriot *et al.* might be assessing the content of *violations* of the psychological contract, rather than merely the content of the psychological contract. Conway (1999) states that this could be an important difference, because certain obligations that are seen as part of an employee's psychological contract might be overlooked or under-represented because they are infrequently violated or exceeded.

Categorizations of the Content of the Psychological Contract

Although there is diversity in the content elements of the psychological contract being measured in empirical studies, based on our review of the literature we discern a limited number of content areas of psychological contract terms that are prevalent in several studies. Some authors have used these content areas to develop subscales of the psychological contract, thereby creating a multidimensional psychological contract measure (e.g. Coyle-Shapiro & Kessler, 1998; 2000c; Ho, 1999; Kickul, 2001a; Schalk *et al.*, 1995). Others have collapsed items referring to different content in one unidimensional psychological contract measure (e.g. Coyle-Shapiro, 2001a; 2001b; Coyle-Shapiro & Kessler, 2002; Guest & Conway, 2000; Schalk & Huiskamp, 2001; Kickul, 2001b) or have conducted analyses using single items instead of scales (e.g. Robinson *et al.*, 1994; Thomas & Anderson, 1998).

In Table 2.1 and Table 2.2 we summarize the content areas measured in several psychological contract studies, together with a description and reference to authors who have employed items or a scale referring to this content area. We have developed this categorization based on our comparison and integration of existing measures (see Appendix 2.1). It is not a generally agreed-upon categorization coming from the literature, but it is helpful to use such a categorization in order to bring theory development on the psychological contract some steps further.

From our review of the literature we distinguish between five major dimensions of ***employer inducements*** entailed in the psychological contract, i.e. (1) *job content*, (2) *career development and training*, (3) *social aspects*, (4) *personal support*, and (5) *rewards* (Table 2.1). These dimensions are used by several researchers in the psychological contract field and they have been measured using single items or scales. They correspond with the major types of retention factors areas discerned within the more managerial literature on retention management[1] (e.g. Cappelli, 2000; Mitchell *et al.*, 2001; Roehling, Cavanaugh, Moynihan & Boswell, 2000).

[1] We have further elaborated on the content dimensions of employer inducements being part of the psychological contract and on their relationship with retention factors in the following paper: De Vos, A., Meganck, A., & Buyens, D. (2002). The role of the psychological contract in retention management: Confronting HR-managers' and employees' views on retention

Other content areas that have been studied are *communication* (Guest & Conway, 2002; Herriot *et al.* 1997), *fairness of HRM procedures* (Freese & Schalk, 1996; Herriot *et al.*, 1997; Schalk *et al.*, 1995), *general commitment to employees* (Porter *et al.*, 1998), and *involvement in decision making* (Coyle-Shapiro, 2001a; 2001b; Coyle-Shapiro & Kessler, 1998; 2000a; 2000b). Although many researchers use items or scales relating to *job security* (Coyle-Shapiro, 2001a; 2001b; Coyle-Shapiro & Kessler, 1998; 2000a; 2000b; 2000c; Guest & Conway, 2002; Herriot *et al.*, 1997; Ho, 1999; Robinson, 1996; Robinson *et al.*, 1994; Rousseau, 1990), we have not included this as a separated area in Table 2.1 since this dimension is also used to describe the psychological contract *features* (see Section 2.2.2.2).

Table 2.1: Content Dimensions of the Psychological Contract used in Psychological Contract Research: Employer Inducements

| DIMENSION | DESCRIPTION | REFERENCES |
|---|---|---|
| **Job Content** | To provide challenging, varied and interesting work | Coyle-Shapiro (2001a; 2001b); Coyle-Shapiro & Kessler (2002); Freese & Schalk (1996; 1999); Guest & Conway (2002); Herriot *et al.* (1997); Ho (1999); Schalk & Huiskamp (2001); Kickul (2001a; 2001b); Schalk *et al.* (1995). |
| **Career Development and Training** | To provide opportunities for promotion and development within the organization or field of work | Coyle-Shapiro (2001a; 2001b); Coyle-Shapiro & Kessler (1998; 2000a; 2000b; 2000c; 2002); Freese & Schalk (1996); Guest & Conway (2002); Herriot *et al.* (1997); Ho (1999); Schalk & Huiskamp (2001); Kickul (2001a; 2001b); Robinson (1996); Robinson & Morrison (1995); Robinson *et al.* (1994); Rousseau (1990); Schalk *et al.* (1995); Shore & Barksdale (1998); Thomas & Anderson (1998). |
| **Social Aspects** | To provide a pleasant and cooperative work environment | Freese & Schalk (1996); Guest & Conway (2002); Herriot *et al.* (1997); Schalk & Huiskamp (2001); Schalk *et al.* (1995); Thomas & Anderson (1998). |
| **Personal Support** | To provide support and understanding for the individual's personal needs and situation | Coyle-Shapiro (2001a; 2001b); Coyle-Shapiro & Kessler (2002); Herriot *et al.* (1997); Ho (1999); Kickul (2001a; 2001b); Robinson *et al.* (1994); Rousseau (1990); Shore & Barksdale (1998); Thomas & Anderson (1998). |
| **Rewards** | To provide appropriate benefits and financial rewards | Coyle-Shapiro (2001a; 2001b); Coyle-Shapiro & Kessler (1998; 2000a; 2000b; 2000c; 2002); Freese & Schalk (1996); Guest & Conway (1994); Herriot *et al.* (1997); Schalk & Huiskamp (2001); Kickul (2001a; 2001b); Robinson (1996); Robinson & Morrison (1995); Robinson *et al.* (1994); Rousseau (1990); Schalk *et al.* (1995); Shore & Barksdale (1998); Thomas & Anderson (1998). |

factors and the relationship with employees' intentions to stay. *Paper under review for publication in Human Resource Management.*

Surprisingly, the content dimensions of ***employee contributions*** have received far less attention within the psychological contract literature. This is remarkable since the perceived reciprocity between employer and employee obligations is a central characteristic in prevailing definitions of the psychological contract (Rousseau, 1995). Exceptions are Coyle-Shapiro (2001a; Coyle-Shapiro & Kessler, 1998; 2000a; 2000b), Freese & Schalk (1996; Schalk *et al.*, 1995), Herriot *et al.* (1997), Schalk & Huiskamp (2001); Robinson *et al.* (1994), Rousseau (1990) and Shore & Barksdale (1998), who have measured both perceived employer and employee obligations. A few authors have only focused on the employee side (Lewis-McLear & Taylor, 1998; Tinsley & Lee, 1999). In Table 2.2 we summarize the major content areas of employee contributions that have been used in existing research, i.e. (1) *job performance*, (2) *extra-role behavior*; (3) *flexibility*, (4) *loyalty*, and (5) *ethics*. In addition to these, Coyle-Shapiro & Kessler (2000a; 2000b) have also assessed willingness to adapt to changes and to stay abreast with developments.

Table 2.2: Content Dimensions of the Psychological Contract used in Psychological Contract Research: Employee Contributions

| DIMENSION | DESCRIPTION | REFERENCES |
|---|---|---|
| **Job performance** | To deliver good work in terms of quality and quantity | Coyle-Shapiro (2001a); Coyle-Shapiro & Kessler (1998; 2000a; 2000b); Freese & Schalk (1999); Herriot *et al.* (1997); Schalk & Huiskamp (2001); Tinsley & Lee (1999). |
| **Extra-role behavior** | To be cooperative and to do work exceeding the formal job description | Coyle-Shapiro (2001a); Coyle-Shapiro & Kessler (1998; 2000a; 2000b); Freese & Schalk (1999); Herriot *et al.* (1997); Schalk & Huiskamp (2001); Robinson *et al.* (1994); Rousseau (1990); Shore & Barksdale (1998); Tinsley & Lee (1999). |
| **Flexibility** | To be flexible in order to get the job done | Coyle-Shapiro (2001a); Coyle-Shapiro & Kessler (1998; 2000a; 2000b); Freese & Schalk (1999); Herriot *et al.* (1997); Schalk & Huiskamp (2001); Tinsley & Lee (1999). |
| **Loyalty** | To stay with the organization for a minimum period of time | Freese & Schalk (1999); Herriot *et al.* (1997); Robinson *et al.* (1994); Rousseau (1990); Shore & Barksdale (1998). |
| **Ethics** | To protect the organization's image and to deal honestly with resources and properties | Freese & Schalk (1999); Herriot *et al.* (1997); Schalk & Huiskamp (2001); Robinson (1996); Robinson *et al.* (1994); Rousseau (1990). |

The almost exclusive focus upon employer inducements rather than on employee contributions could be explained by the fact that most studies focus on the relationship between psychological contract evaluation and outcomes (employee attitudes and behaviors). This relationship makes more sense when focusing on the fulfillment of employer obligations and is in line with other streams of research studying the relationships between organizational policies and practices and employee outcome variables (e.g. perceived organizational support, leader-member exchange, high commitment human resource practices). However, given the central feature of reciprocity in psychological contract definitions it is also relevant to study the degree to which perceptions of employee obligations are contingent upon perceived employer obligations and how these change during the employment relationship (Arnold, 1996; Coyle-Shapiro, 2000). As Rousseau & Tijoriwala (1998: 692) note: "*central to the workings of psychological contracts is the interplay between employee and employer obligations, their relative magnitude and contingent relations*". However, as to date the focus of this interplay has generally taken only one direction: from the employer to the employee.

Authors have also grouped items along a different categorization principle, using two broad categories of ***transactional obligations*** and ***relational obligations*** to characterize the broad content of the psychological contract (Coyle-Shapiro & Kessler, 1998, 2000a; 2000b; 2000c; Ho, 1999; Robinson *et al.*, 1994; Robinson & Morrison, 1994; Rousseau, 1990). The reason for making this transactional – relational distinction is that both categories are proposed to have different degrees of severity in how employees respond to perceived breach (Coyle-Shapiro, 2000). It is assumed that the impact of the psychological contract on outcome variables is more prevalent, or stronger, for relational contracts than for transactional contracts since the former involve more implicit and socio-emotional elements and are more based on trust (Conway, 1999; Coyle-Shapiro, 2000). However, as Arnold (1996) notes, the empirical support for this distinction is not unequivocal. For instance, the employer obligation to provide training loads on the transactional scale in one sample (Rousseau, 1990) and on the relational scale in another sample (Robinson *et al.*, 1994). Moreover, this categorization is confusing since the transactional – relational distinction is also used to represent two ends of a contractual continuum used to describe the *features* of the psychological contract. We will further elaborate on this in the subsequent section (2.2.2.2).

Another approach for categorizing the content of the psychological contract is based upon Mumford's (1978) categorization of organizational role expectations towards its employees and employees' needs regarding organizational inducements. Departing from this categorization, Mumford (1978) conceptualized the employment relationship as consisting of ***five implicit contracts*** between management and employees. Dopson & Neumann (1998) have applied his categorization to the psychological contract framework, delineating five so-called psychological contract areas. These areas, which are represented in Table 2.3, provide a framework for describing and analyzing the content of the psychological contract at a higher level of abstraction.

Table 2.3: Five Psychological Contract Areas (Mumford, 1978; Dopson & Neumann, 1998)

| CONTRACT | ORGANIZATION'S PERSPECTIVE | EMPLOYEE'S PERSPECTIVE |
|---|---|---|
| Knowledge contract | Level of required skills and knowledge in its employees in order to function efficiently. | Desire to use and further develop one's skills and knowledge. |
| Motivational contract: effort-reward bargain | Need for employees who are motivated to put effort in their work. | The individual's unique reasons for motivation (career ambition, needs, values). |
| Goals and means contract | Expectations regarding the basic goals of the organization and the preferred means through which these goals should be monitored and attained | Concerns with support services and work controls that enable him to work efficiently |
| Role behavior contract | Expectations about how the employee should behave in the organization. | Standards of behavioral conduct expected. |
| Ethics contract | Maintenance of the public identity and integrity of the organization. | Values and work ethics considered essential by the employee. |

Psychological Contract Types

Departing from an assessment of the content of employer and employee obligations, Shore & Barksdale (1998) have examined the ***degree of balance and reciprocity between both parties' obligations***. They consider four types of psychological contracts, that are the result of their positioning on two dimensions characterizing the psychological contract content: degree of balance and level of obligations. *Degree of balance* refers to employees' perceptions that the level of employee and employer obligations within the psychological contract is similar. Employees perceiving a balanced relationship feel obligated to reciprocate what they receive from the

organization in order to create balance in their exchange relationship. In an unbalanced relationship on the other hand, either the employee or the employer is perceived to be substantially more obligated than the other party to the exchange relationship. Perceived *level of obligations* refers to the degree of investment made in the relationship by each party. Obligations can range from high (the employee or employer is perceived as having a strong obligation to fulfil a particular contract term) to low (there is a very limited, or non-existent sense of obligation to fulfil a particular contract term). The combination of both dimensions results in four psychological contract types, which were also empirically confirmed. These types are the following: (1) *mutual high obligations type*, consisting of employees with the highest sense of obligation to and from the organization; (2) *mutual low obligations type*, consisting of employees with a weak to moderate sense of obligation to and from the organization; (3) *employee over-obligation type*, consisting of employees with moderate levels of employee obligations and low levels of organizational obligations; and (4) *employee under-obligation type*, consisting of employees with very weak obligations to and high obligations from the organization.

By clustering employees as a function of their perceptions of employer and employee obligations it becomes possible to explicitly capture the exchange aspect of obligations (Conway, 1999). Rousseau (1990) also studied psychological contract types using canonical correlation analyses between sets of employee obligations and employer obligations. She found two types of psychological contracts. The first contained items of obligations that reflected what she called a transactional psychological contract (employer obligations of high pay, rapid promotion and performance-based pay and employee obligations of advance notice, accepting transfers, no competitor support and protection of proprietary information). The second contained items of obligations that reflected a relational psychological contract (employer obligations of training, long-term job security, career development and personal support and employee obligations of working overtime, loyalty and extra-role behavior). As mentioned before, this transactional – relational categorization is more appropriate for studying psychological contract features so we will come back to it in the subsequent section. It is also with respect to the features facet of the psychological contract that other researchers have studied psychological contract types (e.g. Van den Brande, 2002).

#### *2.2.2.2. Features of the Psychological Contract*

In the previous section we have discussed the content facet of the psychological contract. The second facet considered by Rousseau & Tijoriwala (1998) are the features of the psychological contract. Although it is sometimes difficult to distinguish between psychological contract content and features, conceptually there is a clear distinction between both. As defined by Rousseau & McLean Parks (1993) and Rousseau & Tijoriwala (1998), psychological contract features refer to *broad, general characteristics of the employment relationship* without involving perceptions of specific employer and employee obligations. The perspective on psychological contract features thus captures the *properties that underlie the concrete terms of the contract and which are conceptually independent from the specific contract terms*. In this way they differ from the dimensions of inducements and contributions defining the content of the psychological contract. Measures of psychological contract features generally focus upon the characteristics of the psychological contract as they are perceived by employees and/or employers.

Based upon prior work by MacNeil (1985), Rousseau & McLean Parks (1993) have enumerated five dimensions that represent underlying features of the psychological contract: 1) *stability*, 2) *scope*, 3) *tangibility*, 4) *focus*, and 5) *time frame*. Other authors have also identified *particularism* as an important psychological contract feature (in McLean Parks *et al.*, 1998). A brief description of each of these dimensions is given in Table 2.4.

Table 2.4: Psychological Contract Features (Rousseau & McLean Parks, 1993; McLean Parks *et al.*, 1998)

| FEATURE | DESCRIPTION | CONTINUUM |
|---|---|---|
| **Stability** | The degree to which the psychological contract is limited in terms of its ability to evolve and change without an implied renegotiating of the terms. | Static – Dynamic |
| **Scope** | The extent to which the boundary between one's employment relationship and other aspects of one's life is seen as permeable. | Narrow – Comprehensive |
| **Tangibility** | The degree to which the individual perceives the terms of the contract as unambiguously defined and explicitly specified, and clearly observable to third parties. | Publicly observable – Subjectively understood |
| **Focus** | The relative emphasis of the psychological contract on socio-emotional versus economic concerns. | Economic – socio-emotional |
| **Time frame: duration** | The extent to which the relationship is perceived to be short-term or long-term. | Close ended – open-ended |
| **Time frame: precision** | The extent to which the duration of the relationship is seen as finite (defined) or indefinite (undefined). | Specific duration – indefinite duration |
| **Particularism** | The degree to which the individual perceives the resources exchanged as unique and non-substitutable. | Substitutable – non-substitutable |

At a more aggregated level, these dimensions are combined to distinguish between the two major types of psychological contracts that are situated on both opposites of what Rousseau (1995) calls a bipolar *contractual continuum*, ranging from *transactional* to *relational* psychological contracts. ***Transactional contracts*** are characterized by a narrow focus and a well-specified, brief time frame, leading to exchange relationships whose parties have limited involvement in the relationship. They contain almost exclusively economic terms. Parties to the contract contribute independently (MacNeil, 1985). ***Relational contracts*** contain general terms that are subject to clarification or modification during the course of the relationship. They are open-ended and broad in scope, containing socio-emotional elements apart from economic terms. They are highly subjective and parties to the contract are interdependent. The distinction between transactional and relational contracts is very similar to Blau's (1964) notion of economic and social exchange (on which we will elaborate in more detail in section 2.4.2). Table 2.5 summarizes the major features of both psychological contract types.

Table 2.5: Description of two types of psychological contracts (adapted from MacNeil, 1985; Millward & Brewerton, 2000; Rousseau, 1995; Rousseau & McLean Parks, 1993)

| TRANSACTIONAL PSYCHOLOGICAL CONTRACTS | RELATIONAL PSYCHOLOGICAL CONTRACTS |
|---|---|
| • Short-term monetizable exchanges<br>• Specific economic conditions as primary incentive (wage rate)<br>• Limited personal involvement in the job<br>• Specified time frame<br>• Commitments limited to well-specified conditions<br>• Limited flexibility<br>• Use of existing skills<br>• Unambiguous terms | • Open-ended relationship and time-frame<br>• Considerable investments by employees and employers<br>• High degree of mutual interdependence and barriers to exit<br>• Whole-person relations<br>• Dynamic and subject to change<br>• Pervasive conditions (affects personal life)<br>• Subjective and implicitly understood |

As mentioned in the previous section, the transactional – relational distinction has been used by several researchers for grouping content terms of the psychological contract. However, as we already pointed out in that section, the evidence supporting the distinction based upon the content of the psychological contract is not unequivocal (Arnold, 1996; Conway, 1999; Coyle-Shapiro, 2000).

A problem with this categorization of psychological contract features is that at the empirical level it is almost impossible to distinguish the operationalization of psychological contract features from the psychological contract content. Only a few studies have empirically assessed the viability of the transactional – relational distinction using an explicit operationalization of features instead of content terms (Freese & Schalk, 1996; 1997; Millward & Hopkins, 1998; Schalk *et al.*, 1995; Van den Brande, 2002). We have summarized the scales used by these authors in Appendix 2.2. Here we briefly review the measures developed by Millward & Hopkins (1998) and by Van den Brande (2002) since these authors have explicitly focused their research on finding adequate operationalizations of psychological contract features.

Millward & Hopkins (1998) constructed a 32-item scale to measure relational and transactional aspects of the psychological contract using the dimensions described above. Factor-analysis yielded a two-factor solution that was used to produce reliable subscales reflecting the transactional and relational psychological contract types. These authors also obtained preliminary evidence for the construct validity of these scales. The relational subscale was significantly more strongly linked with permanent than with temporary contracts, with full-time than with part-time working conditions, and with long-term than with short-term employment relationships.

More recently, Van den Brande (2002) also developed and validated a scale to measure the features of the psychological contract (see also Janssens, Sels, Van den Brande & Overlaet, 2002; Sels, Janssens, Van den Brande & Overlaet, 2002). Departing from the psychological contract features discerned by McLean Parks *et al.* (1998) and from the cross-national research on psychological contracts coordinated by Rousseau & Schalk (2000), these authors considered six dimensions of psychological contract features: (1) *time frame,* (2) *tangibility,* (3) *scope,* (4) *stability,* (5) *power distance,* and (6) *individualization.* At the empirical level, these were operationalized in terms of six dimensions of *expected organizational inducements* (long-term involvement, tangibility, personal treatment, carefulness regarding arrangements, power distance and equal treatment) and six dimensions of *expected employee obligations* (loyalty, open attitude, personal investment, flexibility, respect for authority, individualization). Based upon these dimensions (but excluding the dimensions power distance and individualization) and using cluster analyses, six types of psychological contracts were defined that are characterized by different patterns of perceived entitlements and obligations: (1) *instrumental,* (2) *weak,* (3) *loyal,* (4) *unattached,* (5) *investing, and* (6) *strong* psychological contract type. Employees within different clusters differed not only with respect to the features of their psychological contracts but they also had distinct profiles in terms of level of education, age, type of formal contract, sector and other more objective characteristics (Janssens *et al.,* 2002; Van den Brande, 2002).

The studies conducted by Millward & Hopkins and by Van den Brande and her colleagues are about the only studies in which a measurement of psychological contract features has been developed based upon a sound theoretical perspective. A major distinction between both is the specific operationalization used. While Millward & Hopkins (1998) use items that express general statements about the employment relationship, Van den Brande and her colleagues assess employees' expectations about specific entitlements and obligations which come very close to the content of the psychological contract. For example, while flexibility is considered as a psychological contract feature, other researchers have used it to measure the content of the psychological contract. The same holds entitlements relating to carefulness of arrangements and long-term involvement. Moreover, for some dimensions the correlations between the scales representing employer inducements and employee obligations were weak, making conclusions about the *general* characteristics of the psychological contract, without reference to employer or employee obligations, difficult.

Theoretically it sounds feasible to prefer a feature-oriented approach to psychological contracts, since this should enhance comparisons across different subject groups, something which is more difficult when using content measures since some of these, like career development, are not relevant for certain groups of employees. Feature-oriented measures are more abstract and therefore they should enhance comparability (Rousseau & Tijoriwala, 1998). However, empirically the existing measures suggest that it is difficult to retain this distinction (e.g. Sels *et al.*, 2002), certainly when we look at those studies where content measures have been used to subsequently categorize content elements along the transactional – relational typology (e.g. Robinson *et al.*, 1994). The research conducted by Millward & Hopkins (1998) and by Van den Brande and her colleagues (2002; Janssens *et al.*, 2002; Sels *et al.*, 2002) are important steps to further elaborate on the meaning and operationalization of the features of the psychological contract. Future research has to clarify if and how this feature-oriented approach can be distinguished from the content-oriented approach.

#### *2.2.2.3. Evaluation of the Psychological Contract*

The third facet of the psychological contract refers to *the individual's evaluation of the degree of fulfillment of the psychological contract*. Legally, a breach of contract is defined as a less than perfect performance by one of the parties regarding contract terms (cf. Conway, 1999). In contrast, psychological contract evaluations, like perceptions of obligations, can be wholly subjective. This means that an employee may perceive that the organization is not fulfilling its promises, but the organization (or an agent representing the organization) may not perceive this lack of fulfillment or even be aware that the underlying agreement exists (Rousseau, 1995).

In the literature, psychological contract evaluation is often described as being equal to psychological contract *violation*. Robinson & Rousseau (1994) define psychological contract ***violation*** as the *perception of one party to the contract that the other party has failed to fulfil promised obligations*. Rousseau (1990) points out that ***violated promises*** are at the core of psychological contract violation. According to her, this differentiates evaluation of the psychological contract from the concept of unmet expectations (Wanous, Poland, Premack & Davis, 1992). The perception of violation results from a perceived failure by the other party to the relationship to comply with the promissory terms of the psychological contract. Therefore, perceived violation will have stronger effects on individuals' attitudes and behaviors than mere unmet expectations will have. This assumption has been empirically demonstrated by Robinson (1996) and Turnley & Feldman (2000). Both studies show that perceived contract violation explains unique variance in employee behavior above that accounted for by unmet expectations.

However, some debate exists about how violations should be defined. According to the definition formulated by Robinson & Rousseau (1994), violation is a *cognitive evaluation* of what is received compared to what was promised. According to Morrison & Robinson (1997; Robinson & Morrison, 2000), this cognitive evaluation is better defined as a ***breach*** of the psychological contract. They argue that the term "violation" should be reserved to describe the emotional and affective state that may follow from this cognitive evaluation of psychological contract breach. Thus, they consider violation as an emotional experience that arises from an interpretation process that is cognitive in nature. What Rousseau (1995) defines as a violation is similar to what Morrison & Robinson (1997; Robinson & Morrison, 2000) define as breach resulting from one party reneging on its obligations.

<u>Centrality of the Promissory Element in Psychological Contract Evaluation</u>

In the literature, the terms psychological contract breach and violation are often used interchangeably by researchers. Both terms are used to reflect the perceived failure of one party (generally the employer) to fulfill its obligations to the other party (generally the employee). When we look at the operationalizations of psychological contract evaluation used in the literature, we see even more differences. An overview of these operationalizations is presented in Appendix 2.3. Summarizing this overview, we discern four types of operationalizations. Three of these correspond with the operationalizations of the content of the psychological contract.

First, some authors measure psychological contract fulfillment by asking for the extent to which inducements received are more or less than expected or whether the level of inducements provided compared with expectations is acceptable (e.g. Freese & Schalk, 1999; Freese *et al.*, 1999; ten Brink *et al.*, 1999). Others ask for the extent to which obligations have been fulfilled or provided without reference to the promissory element (e.g. Coyle-Shapiro, 2001b; Coyle-Shapiro & Kessler, 1998; 2000b; 2000c). Third, some authors only measure the actual provision of inducements or contributions without reference to expectations, entitlements or promises (e.g. Coyle-Shapiro, 2001a; 2002; Porter *et al.*, 1998). The fourth group comes closest to the definition of psychological contract breach formulated by Robinson & Rousseau (1994). These operationalizations ask for the extent to which the organization has kept its promises (e.g. Guest & Conway, 2002; Ho, 1999; Kickul, 2001a; 2001b; Lester *et al.*, 2002; Robinson, 1996; Robinson *et al.*, 1994; Turnley & Feldman, 1998; 1999; 2000).

In this thesis we will define the evaluative facet of the psychological contract in terms of its perceived fulfillment, i.e. ***the degree to which one party believes that he/she or the other party is fulfilling its promises.*** In this sense, *we consider perceived fulfillment to be inversely related to perceived breach so that the greater the fulfillment, the less the perception of breach and vice versa* (Coyle-Shaprio & Kessler, 2000b). This definition corresponds with Rousseau's initial conceptualization of psychological contract violation. We will not use the term violation since this only includes a negative evaluation (thus making it impossible to examine over-fulfillment). As Conway (1999) has argued, the use of the term "breach" to describe the perception that one party has failed to fulfil its promises is more precise, and in line with legal contracts, than calling these events "violations". Moreover, despite the usage of the term violation, most empirical studies tend to focus on breach *per se*.

Global versus Content-Specific Measures of Psychological Contract Evaluation

Some authors measuring psychological contract breach or violation operationalize this as a *unidimensional construct*, without taking into account the different content areas of the psychological contract (e.g. Larwood *et al.*, 1998; Lewis-McLear & Taylor, 1997; 1998; Robinson & Morrison, 2000; Robinson & Rousseau, 1994). Other authors have *aggregated items referring to different content dimensions* into one measure of fulfillment (e.g. Colye-Shapiro, 2001a; Freese *et al.*, 1999; Guzzo *et al.*, 1994; Robinson, 1996). Robinson (1996) states that this global measure reflects a culmination of perceptions about how specific terms of the psychological contract have been fulfilled.

Authors who do make a distinction between different content dimensions when measuring psychological contract evaluation mostly focus on the categorization of transactional versus relational content terms (e.g. Coyle-Shapiro & Kessler, 1998; 2000a; 2000b; 2000c; Ho, 1999; Robinson & Morrison, 1995; Tinsley & Lee, 1999). Only a few authors have taken into account content dimensions as those we have discussed in section 2.2.2.1 (Freese & Schalk, 1996; Kickul, 2001a; Schalk *et al.*, 1995). In other studies, single-item or global assessments of psychological contract evaluation are used. For example, Turnley & Feldman (1998) measured 16 specific content elements of the psychological contract (e.g. salary, job challenge, support). However, they did not construct scales based on these elements, which limits the reliability due to single-item measurement. In subsequent research, these authors used the same 16 items but this time they were aggregated into one single scale (Turnley & Feldman, 1999; 2000). Other authors have also aggregated items into one single scale of contract evaluation (e.g. Coyle-Shapiro, 2001a; 2001b; 2002; Freese & Schalk, 1999; Guest & Conway, 2002; Guzzo *et al.*, 1994; Kickul, 2001b; Lester *et al.*, 2002; Porter *et al.*, 1998; Robinson, 1996).

### 2.2.3. Conclusions

Over the past decade many studies have been published in which the psychological contract has been used as a central construct. In this research it has been the cognitive-perceptual view that has been prevalent in most of the conceptualizations of the psychological contract (Millward & Brewerton, 2000). However, also various critical

remarks regarding its conceptualization can be made (e.g. Arnold, 1996; Guest, 1998a; 1998b; Herriot & Pemberton, 1997; Millward & Brewerton, 2000; Rousseau, 1998a; Sels *et al.*, 2002; Van den Brande, 1999). For instance, there is confusion concerning the role of promises versus mere expectations or obligations in psychological contract operationalizations and there are inconsistencies in the way it has been conceptualized (e.g. as an individual-level phenomenon as opposed to a relationship of exchange). According to Guest (1998), too much attention has been paid to the broad but unclear transactional – relational distinction in psychological contracts, with little consideration of other contract dimensions. Herriot & Pemberton (1997) have pointed out the limitations of a static content-focused approach to psychological contracts. They stress the importance of considering the dynamic nature of the psychological contract by focusing on how the exchange process evolves during the course of the employment relationship. Millward & Brewerton (2000) stipulate that even if the psychological contract is defined as a cognitive-perceptual entity existing at the level of the individual, researchers still need to take into account the issue of with whom the individual sees him or herself as holding the contract. This means that more attention needs to be paid to the influence of the organizational context and to the process of contracting.

These criticisms all relate to the fact that the literature is still characterized by an on-going debate about the exact definition and meaning of the psychological contract, and they stress the need for better integration of theories that have been developed and empirical studies that have been conducted so far. Despite the need for an answer to these criticisms, psychological contract researchers have shown that the construct is valid and useful for understanding and explaining employee attitudes and behaviors in the workplace. In the next section, we will discuss the empirical results that have been obtained in this respect.

### 2.3. The Psychological Contract as an Antecedent of Employee Attitudes and Behaviors

The growing body of literature on the psychological contract reflects accumulating evidence for the substantial influence the psychological contract has on diverse work-related attitudes and behaviors. More specifically, the empirical studies focusing on the *impact of the evaluative facet of the psychological contract* have shown that the perception of psychological contract breach or violation is related to decreased job satisfaction, increased intent to turnover and actual turnover and a reduction in organizational citizenship behavior, while a perception of psychological contract fulfillment is related to positive attitudes and behaviors towards the organization. As we have outlined in the previous section, psychological contracts exist in the eyes of the beholder and it is at this individual level that psychological contracts are postulated to affect both attitudes and behaviors (Rousseau, 1990). More specifically, the studies reported here all focus on *employees' evaluations* of psychological contract breach on subsequent employee attitudes and behaviors.

We have summarized our review of existing research on the relationship between psychological contract evaluation and outcome variables in Appendix 2.4. In this summary we have also presented the specific operationalization of psychological contract evaluation used. In this section we will discuss the major findings regarding each outcome variable. Before starting this review, we remark that not all studies have conceptualized and operationalized the evaluative facet of the psychological contract in the same way. As we already have pointed out in the previous section, a distinction can be made between the perception and cognitive evaluation of psychological contract breach on the one hand, and the affective reaction to this breach that leads to perceived violation on the other hand. Within the empirical literature, most authors do not explicate whether they are measuring psychological contract breach versus violation, or they use both terms interchangeably.

We successively summarize the evidence on the relationship between the psychological contract and employee attitudes (section 2.3.1), and behaviors (section 2.3.2).

### 2.3.1. Relationship between Psychological Contract Evaluation and Employee Attitudes

Several studies have addressed the relationship between employees' evaluations of psychological contract fulfillment by the organization and employee attitudes. Four major types of employee attitudes have been studied in this respect: *satisfaction* (section 2.3.1.1), *commitment* (section 2.3.1.2), *trust* (section 2.3.1.3), and *intention to turnover* (section 2.3.1.4).

#### *2.3.1.1. Satisfaction*

A number of studies have investigated the relationship between psychological contract evaluation and employee satisfaction. Guest & Conway (1998) found that perceived psychological contract fulfillment by the employer was positively related to *general satisfaction*, while perceived breach has been found to be negatively correlated with general satisfaction (Cassar, 2001; Robinson *et al.*, 1994; Robinson & Rousseau, 1994; Tinsley & Lee, 1999). Also the more specific variable *job satisfaction* was negatively associated with psychological contract breach. (Guest *et al.*, 1996; Guest & Conway, 1997; 1998).

#### *2.3.1.2. Commitment*

Several researchers have examined the relationship between psychological contract evaluation and commitment. Based on their study among 134 dyads of employees – supervisors, Lester *et al.* (2002) conclude that perceived psychological contract breach leads to decreased levels of *general commitment* to the organization. More specifically, Freese & Schalk (1996; 1997) found that employees who reported psychological contract breach subsequently reduced their *affective commitment* to the organization. This relationship was also significant in a study among IT-employees conducted by Guest, Mackenzie Davey & Patch (1998) and among two samples of managers who were experiencing an organizational restructuring process (Turnley & Feldman, 1998; 1999; 2000). In addition to this relationship with affective commitment, Ten Brink *et al.* (1999) also found a negative relationship between psychological contract breach and *normative commitment*. Guzzo *et al.* (1994) showed that the relationship between perceived psychological contract fulfillment and commitment also holds when taking into account the mediating role of perceived organizational support. Their results are based on a sample of expatriate managers.

#### *2.3.1.3. Trust*

A third outcome variable that has been investigated is trust in the organization. Robinson (1996) and Robinson & Morrison (1995) both found that the perception of psychological contract violation resulted in decreased levels of employees' trust in the organization. Robinson *et al.* (1994) also observed decreased levels of trust following a perception of psychological contract breach. Guest & Conway (2002) found that managers' reports of organizational contract breach were negatively associated with their perceptions of trust among their employees.

#### *2.3.1.4. Intention to Turnover*

Evidence exists that employees who believe their organization has breached its promises reduce their intentions to stay with the organization. For example, using a longitudinal study design Freese *et al.* (1999) observed that the perception of psychological contract breach during a change process increased employees' intentions to leave the organization (see also Freese & Schalk, 1996; 1997; Schalk *et al.*, 1995). In their study among a representative sample of employees in the United Kingdom, Guest & Conway (1997; 1998) also found that perceived psychological contract breach was associated with stronger intentions to leave. Guzzo *et al.* (1994) observed that expatriate managers who reported psychological contract breach not only increased their intentions to quit the organization but also their intentions to return early from their expatriation. Robinson (1996) and Robinson & Morrison (1995) observed that perceptions of psychological contract breach by graduate recruits who recently entered the organization were also followed by a decrease in intentions to stay. The same relationship was observed by Robinson *et al.* (1994) and Kickul (2001a). Finally Turnley & Feldman (1998; 1999; 2000) studied the effects of psychological contract violation among two samples of managers undergoing

a restructuring process. They found a positive impact of perceived violation on intention to turnover and a negative effect on loyalty.

### 2.3.2. Relationship between Psychological Contract Evaluation and Employee Behaviors

The role of the psychological contract has not only been investigated in relationship with employee attitudes but also in relationship with their behaviors in the workplace. Studies have focused on the following types of behaviors: *organizational citizenship behavior* (section 2.3.2.1), *performance* (section 2.3.2.2), *actual turnover* (section 2.3.2.3), and *contract-related behaviors* (section 2.3.2.4).

#### *2.3.2.1. Organizational Citizenship Behavior*

Several studies have found psychological contract breach to affect employees' organizational citizenship behaviors (OCB) (e.g. Lewis-McLear & Taylor, 1997; 1998; Robinson, 1996; Robinson & Morrison, 1995). Colye-Shapiro & Kessler (1998; 2000a; 2000b) observed that perceived fulfillment of relational employer obligations had a positive effect on employees' perceptions of their extra-role obligations towards their organization. This relationship was not significant for the fulfillment of transactional employer obligations. Lewis-McLear & Taylor (1997; 1998) report a negative relationship between perceived psychological contract breach and four dimensions of OCB (altruism, courtesy, civic virtue and conscientiousness) and a positive relationship with anti-citizenship behavior. This relationship was found within a sample of matched pairs of supervisors and employees (1997) as well as within a large sample of employees and managers of a public-sector organization (1998). Using a longitudinal study among graduate recruits who had recently entered the organization, Robinson (1996) and Robinson & Morrison (1995) found that perceived psychological contract breach was negatively related to the OCB dimension of civic virtue behavior. Turnley & Feldman (1998) observed a decrease in OCB following the perception of organizational psychological contract breach during corporate restructuring. Finally Kickul (2001b) found a positive relationship between employees' perceptions of psychological contract breach and their supervisors' evaluation of their deviant work behavior.

#### *2.3.2.2. Performance*

Perceived psychological contract breach has been shown to reduce employees' job performance. This relationship has been found in studies using employee self-reports on their performance (Robinson, 1996; Robinson & Morrison, 1995; Tinsley & Lee, 1999) as well as in studies using supervisor reports measuring job performance of the focal employee (Lester *et al.*, 2002; Lewis-McLear & Taylor, 1997; 1998).

#### *2.3.2.3. Turnover*

A few studies have found a positive relationship between psychological contract breach and actual turnover (Guzzo et al., 1994; Robinson, 1995; Schalk *et al.*, 1995). For example, Robinson (1996) and Robinson & Morrison (1995) found that there was more turnover among those graduate recruits who reported contract breach by the organization than among those who made up a positive evaluation of psychological contract fulfillment. In the study conducted by Robinson *et al.* (1994) perceived psychological contract violation was also associated with actual turnover over time.

#### *2.3.2.4. Contract-Related Behaviors*

Finally, a few researchers have explicitly addressed the relationship of employer contract fulfillment on employee contract-related behaviors. They observed that perceived psychological contract breach is related to employees' perceptions of their own contributions as well as their actual contract-related behaviors (Herriot & Pemberton, 1996; Lewis-McLear & Taylor, 1998; Robinson *et al.*, 1994; Tinsley & Lee, 1999). For example, Robinson *et al.* (1994) found that employees react to the perceived breach of relational promises by their employer by redefining their own engagement as more transactional. Coyle-Shapiro & Kessler (2000b) have

investigated the relationship between perceived transactional and relational psychological contract fulfillment and perceived employee obligations. They found that relational contract fulfillment by the employer leads to employee fulfillment of obligations, while breach is negatively related to both perceived employee obligations and reported fulfillment of obligations. This relationship was stronger when employees believed perceived employer control to be high and when procedural justice was reported to be low. Freese *et al.* (1999) found that perceived violation of employer obligations was correlated with a transactional psychological contract from the side of the employee. Finally, Lewis-McLear & Taylor (1998) report a positive association between employees' perceptions of organizational contract breach and employee contract breach.

### 2.3.3. Conclusions

Together, the information on the negative effects of perceived psychological contract breach and the positive effects of perceived psychological contract fulfillment suggests that the psychological contract is a construct of both practical and theoretical importance. Moreover, it provides evidence for the conceptualization of the psychological contract as an *exchange construct*. The results of the empirical studies we have reviewed demonstrate that individuals tend to reciprocate on their experiences by contributing poorly to the organization when they have negative experiences with contract fulfillment and by contributing positively to the organization when they have positive experiences with contract fulfillment.

A diary study conducted by Conway & Briner (2000; 2002) provides more information on the *specific reactions of employees to day-to-day evaluations of psychological contract fulfillment*. These authors report that employees' perceptions of broken promises were related to daily mood and to feelings of hurt and betrayal. Exceeded promises, on the other hand, were related to enthusiasm and to feelings of self-worth, of being cared for and of surprise. While negative evaluations led to both constructive and destructive behaviors, positive evaluations led to direct and indirect reciprocating behaviors. Comparing the effects of positive and negative evaluations, these authors conclude that broken promises have stronger effects on daily mood, while exceeded promises have stronger effects on emotional and behavioral reactions.

The existing evidence about the relationship between the psychological contract and outcomes provides no further information about the *psychological contract content areas* which are most predictive of these outcome variables since most studies use a global or aggregated measure of psychological contract breach. Based on the existing evidence we cannot conclude whether the relationship between psychological contract breach and outcomes is due to the *experience of breach as such* or due to effects caused by the *subject of violation*, i.e. the fact that certain content dimensions of promissory beliefs are violated. In the former case, findings could be further explained using theories like procedural justice or other process-related aspects. In the latter case, the content dimensions and employees' differential expectations with respect to these content dimensions deserve more attention. Further research is needed to clarify this[2].

Surprisingly, almost no studies have focused on the relationship between *the content or features facet of the psychological contract and outcome variables.* According to Coyle-Shapiro (2000), perceived employer obligations reflect anticipated future benefits that may motivate employee behavior. She found that perceived

[2] In a recent study conducted on the relationship between psychological contract breach and employee satisfaction and loyalty using the five dimensions of employer inducements listed in Table 2.1, we found that these dimensions were differentially related to different types of outcomes. While breach of promises relating to career development most strongly affected employees' intentions to leave and their actual job search behaviors, satisfaction was most strongly affected by perceived fulfillment of promises relating to job content and social atmosphere. Fulfillment of promises relating to financial rewards and support were least predictive of these outcome variables. The results of these findings are reported in: Buelens, M., Cools, E., & De Vos, A. (2002). *Werkgenegenheid.* Research report for "Vacature". Gent: Vlerick Leuven Gent Management School.

employer obligations were a significant predictor of more categories of organizational citizenship behavior than the fulfillment of these obligations. She concludes that the type of relationship in terms of the strength and breadth of employer obligations may also be important in understanding employee behavior. Further research should investigate how perceptions of employer and employee obligations are related.

Another area of research that needs further attention is the *role of employee contract fulfillment as an antecedent of employer contract fulfillment.* Almost all studies that have been conducted so far have only addressed employee contract fulfillment as an outcome variable. Building on the conceptualization of the psychological contract as an exchange construct encompassing two parties, one might expect that the extent to which employees fulfill their promises to the organization subsequently affects the inducements the organization offers the employee, or other types of outcomes situated at the organizational level. By specifying this relationship at the level of organizational agents future research could, for instance, investigate the impact of employee contract fulfillment on supervisors' evaluations of employee performance, on their allocation of rewards or promotions, or on their global evaluation of the quality of the relationship with the employee. This type of information is needed in order to complement the evidence for the relationship between organizational psychological contract fulfillment and employee attitudes and behaviors.

In the subsequent section we discuss the theoretical backgrounds that are relevant for understanding the psychological contract.

## 2.4. Theoretical Backgrounds Relevant for Understanding the Psychological Contract

Important foundations of psychological contract theory are situated within distinct scientific disciplines. Based on the literature addressing psychological contracts from a theoretical point of view (Millward & Brewerton, 2000; Rousseau, 1995; 2001b; Rousseau & McLean Parks, 1993; Schalk & Freese, 1997; Shore & Tetrick, 1995), we consider four major theoretical perspectives. Each of them allows us to understand different aspects of the psychological contract. What follows are an analysis and a discussion of these viewpoints.

The theoretical perspectives we will discuss are:

1. *Economic transaction perspective,* concentrating on the bounded rationality of parties to the employment contract;
2. *Social exchange perspective,* concentrating on the conditions of social exchange;
3. *Social-cognitive perspective,* concentrating on the psychological contract as a mental model of the employment relationship;
4. *Career development perspective,* concentrating on the interaction between the individual and the organization.

While each of these perspectives contributes to our understanding of different aspects of the psychological contract, together they provide a broad and rich framework for capturing its major characteristics within the broader framework of organizational behavior and human resource management. The fact that these perspectives stem from distinct scientific disciplines (economics, sociology, and psychology) offers us the opportunity to integrate their basic viewpoints regarding the employment relationship in the psychological contract construct.

### 2.4.1. Economic Transaction Perspective

Economic theories on employment relationships are one of the foundations of psychological contract theory in that they address the *incompleteness and implicit nature of employment contracts* (section 2.4.1.1). They are also relevant because of their conception of *bounded rationality* characterizing contracts and how this contributes to the creation of a relational employment contract (section 2.4.1.2).

### *2.4.1.1. Incompleteness and Implicit Nature of Employment Contracts*

Economic theories employing the concept of contract are predicated on the assumption of rational individuals, acting out of their own competitive interests en seeking for efficient solutions to the problems they face (Milgrom & Roberts, 1992). Within economic theory, it is generally acknowledged that the transactions for labor services are mediated by complex contracts that cover longer, often indefinite periods of time. These contracts are incomplete and they involve important implicit elements. Instead of a simple, arm's-length market transaction between buyer and seller, most employment situations actually represent a complex, long-term relationship between the employer and the employee (Milgrom & Roberts, 1992: 329).

Milgrom & Roberts (1992: 330) distinguish between three factors that prevent parties from complete contracting:

1. Difficulties of foreseeing all the events that might possibly arise over time and the appropriate actions to take;
2. Difficulties of unambiguously describing these events and actions even if they could be foreseen;
3. Costs of negotiating acceptable explicit agreements over these many terms even if they could be described.

Since the written employment contract is incomplete, it is supplemented by unwritten, often completely implicit understandings. These implicit contractual terms govern many of the crucial elements of the employment relationship, including pay, work assignments, and employers' and employees' duties to one another. Milgrom & Roberts (1992) point out that the courts or other third parties cannot enforce these implicit contracts. Rather, they are intended to be self-enforcing. They are structured so that the parties have incentives to deliver their part of the contract for fear of the consequences of violating the agreement. For self-enforcement to function effectively, it is necessary that the parties to the contract understand their obligations to one another, that they can observe each other's behavior and that each party enjoys positive outcomes from the contract.

***This conception of subjectivity being inherent in the employment contract is closely related to the psychological contract.*** Moreover, it also explains the ***duration*** of employment relationships. Since it is the prospect of future gains from maintaining the relationship that provide the incentives under the implicit contract, employment relationships tend to be enduring and long-term (Milgrom & Roberts, 1992).

### *2.4.1.2. Bounded Rationality of Contract Parties*

Williamson (1985; 1988) developed a model in which efficiency at the level of the organization can be attained through transactions: the Transaction Cost Economics (TCE) framework. Two basic assumptions of TCE, namely the existence of *bounded rationality* and the development of *trust*, are also prevailing in psychological contract theories. TCE theory also explains the existence of short-term, transactional, versus longer-term or relational contracts.

According to Williamson (1985; 1988), bounded rationality and parties' opportunism can be reduced by the creation of hierarchies, or longer-term contracts. Hierarchies enhance monitoring capabilities and the resulting social ties reduce opportunism, which may engender trust. Trust is assumed to reduce transaction costs associated with monitoring and to increase the efficiency of the exchange. In a hierarchically governed employment relationship, employees typically have a supervisor whom they have granted legitimate but limited authority to direct their actions within the organization. This type of relationship is described as an "incomplete contingent claims contract", for at the time an employee joins the firm, his or her duties are only partly specified. Firms utilize such incomplete contracts because the costs of writing and enforcing a complete contract covering an employee's entire career with the firm are too high (Barney & Lawrence, 1989). As long as neither the firm

nor the employee engage in activities inconsistent with the implicit psychological contract that underlies their relationship, the relationship continues (Barney & Lawrence, 1989). TCE postulates that long-term contracts are more efficient than short-term contracts in that they are based on relationships permitting unanticipated adjustments and accommodations. In long-term contracts, mutual interdependence is created through the development of asset specificity.

***The proposed existence of longer-term contracts or hierarchies reflects the development of a relational psychological contract as it is described within psychological contract theories.*** According to TCE, the development of a relational contract is determined by contextual factors such as interdependence, past practices and environmental uncertainty (Rousseau & McLean Parks, 1993).

In contrast, in situations where the costs of monitoring an employee's contract are low, a market-governed employment relationship is more efficient. Such employment relations may occur where the job being accomplished is relatively routine or easily measurable, and when employees have no implicit long-term commitments to a firm. Employers manage this employment relationship through "complete contingent contracts", where all employee obligations and compensations are specified a priori. Such relationships cannot be complex. Otherwise, it would be difficult to specify all conditions of the relationship within a contract (Barney & Lawrence, 1989). This relationship corresponds with the notion of transactional contracts in psychological contract theories.
Agency theory further specifies the principles of market-governed employment relationships. Agency theory focuses on the relationship between two parties, where one party (the principal) gives another party (the agent) authority to act on his or her behalf (Rousseau & McLean Parks, 1993). The relationship between principals and agents is governed by a contract specifying what agents should do and how principals will compensate them for their actions. One of the basic assumptions of agency theory is that shirking is a major problem in contracting and that individuals are more prone to shirking than to the fulfillment of their contract (Rousseau & McLean Parks, 1993). Therefore transactional contracts are needed that detail the specific exchange of both parties' contributions.

### 2.4.2. Social Exchange Perspective

The social exchange perspective focuses upon the nature and dynamics of social exchange within organizations and on status and power differences created in exchange relationships. Two elements of social exchange – reciprocity and balance – are essential elements in the conceptualization of the psychological contract. Therefore we will elaborate in more detail on the relevance of social exchange theories in understanding the psychological contract.

Not only the psychological contract but also several other constructs within the organizational behavior literature build on the principles of social exchange theories, e.g. *organizational citizenship behavior* (Organ 1988; Organ & Konovsky, 1989; Organ & Ryan, 1995), *perceived organizational support* (e.g. Eisenberger, Huntington, Hutchison & Sowa, 1986; Eisenberger, Armeli, Rexwinkel, Lynck & Rhoades, 2001; Eisenberger, Fasolo & Davis-LaMastro, 1990), *leader-member exchange* (e.g. Engle & Lord, 1997; Gernstner & Day, 1997; Settoon, Bennett & Liden, 1996), and *organizational justice* (e.g. Masterson, Lewis, Goldman & Taylor, 2000) to name just a few. In general, a social exchange theory on employment relations assumes that an equitable exchange between what employees invest in their relationship with the organization and what they receive back in return is a key element in the employee-organization relationship (Geurts, Schaufeli & Rutte, 1999). Building on this perspective, the notion of a ***psychological contract conveys the promissory beliefs held by employees about the reciprocal nature of their employment relationship*** (Geurts *et al.*, 1999).

In this paragraph we first discuss the basic propositions of social exchange theories (section 2.4.2.1). Next we elaborate on two specific social exchange theories, namely equity theory (section 2.4.2.2) and the contribution-inducement theory (section 2.4.2.3).

#### *2.4.2.1. Basic Propositions of Social Exchange Theories*

Blau (1964), one of the "fathers" of social exchange theories, conceptualized social exchange as "*an exchange of activity, tangible or intangible, and more or less rewarding or costly, between at least two persons*". Social exchange can be considered as a central principle of social life. Blau stipulates that individuals engage in social exchange behaviors in order to achieve goals that can only be realized trough interactions with others. He describes three basic principles underlying the conception of exchange:

1. An individual who supplies rewarding services to another obligates him.
2. To discharge this obligation, the second must furnish benefits to the first in return.
3. If both persons value what they receive from the other, both are prone to supply more of their own services to provide incentives for the other to increase his supply and to avoid becoming indebted to him.

This is in line with Homans' (1961) conception of social exchange: "In social behavior, or true exchange, the activity of each of at least two persons reinforces (or punishes) the activity of the other, and where accordingly each influences the other" (Homans, 1961: 11).

A central condition of social exchange is that it consists of *voluntary* actions of individuals that are *motivated by the returns* they are expected to bring from others. This is in line with the conception of the psychological contract as voluntary entered into (Rousseau, 1995).

We subsequently discuss the distinction between economic and social exchange and the principles of reciprocity and balance inherent in exchange relationships. We also describe the moderating role of expectations in social exchange.

Economic versus Social Exchange

Blau (1964) has delineated five major differences between social and economic exchange.

1. The basic distinction is that social exchange entails *unspecified obligations*, while a prototypical economic exchange rests on a formal contract that stipulates the exact quantities to be exchanged. Social exchange involves the principle that one person does another a favor, and while there is a general expectation of some future return, its exact nature is not stipulated in advance. According to Blau, the nature of a return cannot be bargained in social exchange; it must be left to the discretion of the one who makes it. This assumption partially deviates from our conceptualization of the psychological contract, in that this is based on perceived promises both parties can communicate and negotiate about. But in line with Blau's conception, parties to the contract do not have the power to enforce promises made by the other party.

2. Another important distinction between social and economic exchange is the importance of *trust*. The fulfillment of unspecified obligations involved in social exchange depends on trust since it cannot be enforced in the absence of a binding contract. Processes of social exchange, which may originate in pure self-interest, generate trust in social relations through their recurrent and gradually expanding character. In economic exchange, the nature and extent of what is being exchanged is clearly stipulated. Both parties to the exchange do not depend upon each other's discretion, making it unnecessary to trust the other.

3. Third, the nature of the *benefits* involved in the exchange are distinct in economic versus social exchange. The benefits involved in social exchange do not have an exact price in terms of a single quantitative medium of exchange. The actors themselves cannot precisely specify the worth of approval or help in the absence of a money price.

4. The specific benefits exchanged in social exchanges are sometimes primarily valued as *symbols* of the supportiveness and friendliness they express, and it is the exchange of the *underlying mutual support* that is the main concern of the participants to the exchange.

5. *Extrinsic benefits*, characteristic for economic exchange, are *detachable from the source* that supplies them. The significance of economic benefits is mostly independent from the source, while the significance of social support entirely depends on the individual who supplies it. Blau emphasizes, however, that this detachability is a matter of degree. Extrinsic benefits that are socially exchanged, such as advice, invitations, assistance, or compliance, have a distinctive significance of their own that is independent of their supplier, yet an individual's preferences for them will also affected by his or her interpersonal relations with the supplier.

6. Providing benefits to others through social exchange leads to the *development of bonds of fellowship* or to a *position of superiority* within the exchange relationship.

Reciprocity

The norm of reciprocity is a central element in social exchange theories. According to the reciprocity norm, fulfillment of obligations by one party is conditional on the fulfillment of obligations by the other party. At the level of society, norms of reciprocity, where people help those who have been helpful to them, have been described as universal (Gouldner, 1960), and they are basic to sociological models of exchange. Gouldner defines reciprocity as "*a mutually contingent exchange of benefits between two or more units*" (1960: 164). The essence of reciprocity is that "what one party receives from the other requires some return, so that giving and receiving are mutually contingent" (1960: 169). Reciprocity is quantitatively variable or, in other words, it is a matter of degree. Reciprocity is a central condition of social exchange in that the stability of the exchange relationship will be undermined if the fulfillment of either party's needs is not contingent upon the other party's reactions. This means that *mutuality of fulfillment is a necessary condition for the stability and continuation of an exchange relationship.*

According to Gouldner (1960), both parties to an exchange relationship have expectations regarding what they are entitled to give to and to receive from each other. People are not regarded as blindly involving themselves in reciprocal transactions; they are viewed as having some presentiment of the consequences of reciprocity and of its breakdown. In the long run, people believe that the mutual exchange of goods and services will balance out (Gouldner, 1960). Gouldner assumes that a norm of reciprocity is universal. In its universal form, it makes two interrelated minimal demands: people should help those who have helped them, and people should not injure those who have helped them. According to Gouldner, the norm of reciprocity may be conceived of as a dimension to be found in all value systems.

Blau (1964) stipulates that the norm of reciprocity reinforces and stabilizes tendencies inherent in the character of social exchange itself and that the fundamental starting mechanism of patterned exchange is found in the existential conditions of exchange. Exchange processes utilize the self-interests of individuals to produce a differentiated social structure within which norms tend to develop that require individuals to set aside some of their personal interests for the sake of those of the collectivity.

Balance

According to Gouldner (1960), the *amount of return* to be made in reciprocal exchange is "roughly equivalent" to what has been received. He points out that the problem of equivalence is a difficult but important one. Blau (1964) describes the state of balance as the psychological goal for both parties of a social exchange relationship. According to Blau, both parties will seek to retain the balance between what they provide to the relationship and what they receive from it. When one party perceives the exchange is not in balance, then over time, the individual may ultimately seek to restore the balance by reducing his/her own contributions to the relationship, or by ending the relationship. When one party makes a unilateral change in the exchange relationship, the other party may in turn react to the change by modifying his/her contributions to the exchange. This cycle of action and reaction is typical in social exchanges over the long run (Blau, 1964).

The importance of both reciprocity and balance is also apparent in empirical work on the evaluative facet of the ***psychological contract*** (e.g. Robinson, 1996; Robinson & Morrison, 1995; Turnley & Feldman, 1998). The empirical findings regarding the impact of perceived psychological contract fulfillment on outcome variables (as discussed in section 2.3) suggest that employees reciprocate to the organization's fulfillment of the psychological contract by reducing or increasing their own contributions to the organization, in order to restore balance in the employment relationship.

The Moderating Role of Expectations in Social Exchange

Blau (1964) asserts that individuals have prior expectations regarding the social rewards they will receive from an exchange relationship, which will influence their evaluation of the benefits received from that relationship. These expectations, in turn, are based on the past social experience of individuals and on the reference standards they have acquired from rewards obtained in the past and from learning about the benefits others in comparable situations obtain.

Blau (1964) distinguishes between three types of expectations of social rewards: (1) *general expectations*, (2) *particular expectations,* and (3) *comparative expectations*. *General expectations* refer to the expectations an individual has of the total benefits he will achieve in various aspects of his social life, including his work and career. They define achievement needs and aspirations. They range from a level of minimum need, without the attainment of which an individual will be dissatisfied and frustrated, to a level of maximum aspirations. General expectations are governed by prevailing values and social standards as well as by individuals' previous experienced attainments. A second type are *particular expectations* an individual has of another person, his behavior and the rewards that social exchange with this person would deliver. The early impression an individual makes on others will determine the nature of the social rewards others expect to obtain from associating with him or her. The strength of the initial attraction to another person depends on the difference between an individual's particular expectations regarding that person and his or her general expectations. More specifically, the extent to which an individual's general expectations can be fulfilled by the particular expectations regarding a specific person will influence the attractiveness of that person. Finally, *comparative expectations* refer to the *profits* individuals expect to realize in social associations, defined as their rewards minus their costs. Comparative expectations constitute a common standard that is independent of the persons to whom it is applied and makes comparisons between them possible. This type of expectations thus refers to the balance between one's own inducements and the contributions received in return and they are governed by *social norms* defining what *fair rates of exchange* are.

According to Blau (1964), prior attainments of people influence their general expectations of what rewards can realistically be realized and what rewards need to be realized to maintain satisfaction. These expectations, in turn, affect the significance of future rewards. Reward levels experienced in the past define minimum expectations that will affect satisfactions with and reactions to a future level of reward.

The role of expectations as outlined by Blau (1964) is helpful for our understanding of the relationship between ***psychological contract*** evaluation and outcomes. Central to the evaluative facet of the psychological contract are the *promissory beliefs* that form the *frame of reference* against which employees make up their evaluations of the inducements they have received from their organization and the contributions they have made (Morrison & Robinson, 1997). These promissory beliefs function in the same way as the expectations in Blau's (1964) theory of social exchange. As outlined by Rousseau (1995) it are these promissory beliefs that make up the distinctive nature of the psychological contract compared with other constructs like mere expectations and perceived entitlements in which the promissory element is absent.

#### *2.4.2.2. Equity theory*

Equity theory, originally formulated by Adams (1965), explicitly addresses the issue of ***balance in exchange relationships*** and relates the perception of (in)equity to *social comparison processes* (Festinger, 1954). The major proposition of equity theory is that the perception of imbalance is based on an individual's comparison of the balance between what he/she gives and receives with the balance of relevant others (Adams, 1965; Leventhal, 1980). Equity theory asserts four basic propositions (Huseman, Hatfield, & Miles, 1987: 222):

1. Individuals evaluate their relationships with others by assessing the ratio of their outcomes from and inputs to the relationship against the outcome/input ratio of a comparison other.
2. If the outcome/input ratios of the individual and the comparison other are perceived to be unequal, then inequity exists.
3. The greater the inequity the individual perceives, the more distress the individual feels.
4. The greater the distress an individual feels, the harder he or she will work to restore equity and, thus, to reduce the distress. Equity restoration techniques include altering or cognitively distorting inputs or outcomes, acting on or changing the comparison other, or terminating the relationship.

Applied to organizations, equity research has examined the impact of perceived equity/inequity on a number of organizational outcome variables, including quantity and quality of work, absenteeism and job satisfaction (e.g. Geurts *et al.*, 1999; Huseman *et al.*, 1987; Ronen, 1986). Equity theory proposes that inequitably rewarded individuals should experience lower levels of job satisfaction than equitably rewarded individuals (Adams, 1965).

Rousseau (1989) argues that equity theory is important to understanding ***psychological contracts***. Equity theory deals with expectations in a more general sense than does the psychological contract – although psychological contracts might be viewed as a special case of equity theory. Equity-based expectations derive from social cues as well as internal standards of fairness. Employees who believe they should have more responsibility (or less) or that they should make more money than their reference persons, have expectations but not necessarily a psychological contract. Reciprocal expectations involved in a contract imply that one party believes his or her actions are bound to those of another based on implicit or explicit promises. According to Rousseau (1995), relationships interject a deeper emotional component to the experience of inequity. When promises and considerations have been exchanged in the context of a relationship (e.g. employment), she proposes that the cognitive and emotional experience of inequity will be more complex than simply involving social comparison of balances.

#### *2.4.2.3. Contribution-Inducement Theory*

The contribution-inducement theory (March & Simon, 1958) is in essence a theory of social exchange, specifically applied to the exchange between an individual and his/her organization and its impact on the individual's decision to participate in the organization. March & Simon (1958) refer to the "Barnard-Simon theory of organizational equilibrium", a description of the conditions under which an organization can induce its members to continue their participation. The organization is conceived as a system of interrelated social

behaviors of a number of persons, called "participants". Each participant in an organization receives from the organization inducements in return for which he or she makes contributions to the organization. Each participant is assumed to continue his or her participation in an organization only as long as the inducements offered to him/her are as great or greater than the contributions he/she is asked to make. *Inducements* are measured in terms of personal values and in terms of the alternatives open to an individual. They are defined as "payments" made by (or through) the organization to its participants. *Contributions* are payments made by the individual to the organization. They are the source from which the organization manufactures the inducements offered to participants. The *balance between inducements and contributions* is central in this theory. As such, this theory applies the basic propositions of reciprocity and balance inherent in social exchange theories to the organizational context.

For each component of inducements or contributions, there is a correspondent *utility value*. The balance between inducement and contribution utility will predict individual satisfaction. March & Simon (1958) postulate that increases in the balance of inducement utilities over contribution utilities decrease the propensity of the individual participant to leave the organization, whereas decreases in that balance have an opposite effect. The zero-point on the inducement-contribution utility scale is the point at which the individual is indifferent to leaving and organization. The inducements-contributions balance is a function of two major components: the perceived desirability of leaving the organization and the perceived ease of movement from the organization.

While March & Simon apply their theory on five categories of participants (i.e. employees, investors, suppliers, distributors, and consumers), it is its *application on employees* that is especially relevant within the context of ***psychological contract*** theory. It is stipulated that "*employees receive wages and other gratuities and donate work (production) and other contributions to the organization*" (March & Simon, 1958: 89). According to March & Simon, a particular aspect of an employee's behavior can be specified in the employment contract, left to the employee's discretion or brought within the authority of the employer. They do not mention the possibility of promises as this is done in psychological contract literature. Psychological contract theory is closely related to the inducement-contribution theory in that it also addresses the reciprocity and balance between employee contributions and organizational inducements.
The *subjective utility accorded to both inducements and contributions* corresponds with the subjective nature of promissory beliefs about employer and employee obligations postulated in psychological contract theory. The assumption that the utility attributed to inducements and contributions will be distinct among individuals, can also be applied to psychological contracts: we can assume that the perceived balance between employer and employee obligations will depend on the subjective importance attached to the terms entailed in the psychological contract. This might also have an impact on the perception of psychological contract breach and/or on the relationship between contract breach and violation.

### 2.4.3. Social-Cognitive Perspective

The social-cognitive perspective provides more insight in *the subjective and idiosyncratic nature of the psychological contract*. It explains how the psychological contract can be conceived of as a *mental model* about the employment relationship, guiding individuals' perceptions of promises and evaluations of promise fulfillment. Central elements are the mental schemas individuals develop about the employment relationship and the role of information seeking and processing. In general, the theories discussed here elaborate on *the central role of meaning individuals attribute to their environment and its impact on their behavior* (James & James, 1989).

In this section we first describe the basis propositions of theories on social perception and cognition (section 2.4.3.1). Subsequently we elaborate on the social information processing theory put forward by Salancik & Pfeffer (1978) (section 2.4.3.2) and on the role of social comparison processes (section 2.4.3.3).

### *2.4.3.1. Basic Propositions of Theories on Social Perception and Cognition*

Theories on social perception and cognition build on a number of basic propositions that are also relevant for our understanding of the psychological contract. In this paragraph we discuss the meaning of cognitive schemas, the development of schemas, the idiosyncratic nature of schemas, the choice of schemas and the relationship between schemas and the concept of meaning. Since these propositions are highly relevant for our understanding of psychological contract development, the central theme of this thesis, we will elaborate on them in more detail.

Cognitive Schemas or Scripts

Most organizations provide complex and noisy informational environments in which employees gather information about other employees and relevant work tasks, which they must then integrate with their own thoughts, feelings, and work behaviors. To manage these multiple information-processing demands, people accomplish many cognitive activities without conscious awareness, attention, or much forethought. They tend to rely on highly structured, pre-existing knowledge systems called ***schemas***, to interpret their organizational world and generate appropriate behaviors (Lord & Foti, 1986).

*A schema is a cognitive structure that represents organized knowledge about a given stimulus – a person or situation – as well as rules that direct information processing.* Schemas provide individuals with a knowledge base that serves as a guide for the interpretation of information, actions, and expectations, thereby simplifying the process by which people make sense of events and situations (Bartlett, 1932; Fiske & Taylor, 1984; Gioia & Sims, 1986; Isenberg, 1986; James & James, 1989; Lord & Foti, 1986). The schema concept specifically maintains that *social information is stored in an abstract form* (Lord & Foti, 1986). Although a schema is an abstract mental construct, it can be thought of as a sort of coherent network of thoughts about something that might be important to an individual. Evidence exists that all individuals use schemas to some significant degree to cognitively organize their experiences (Gioia & Sims, 1986). Schemas typically affect the perception of incoming information, the retrieval of stored information, and inferences based on that information (Lord & Foti, 1986).

Four types of schemas are considered in social schema research (Fiske & Taylor, 1984; Lord & Foti, 1986):

1. *Self-schemas.* This type of schema contains information about one's own personality, appearance, and behavior (Fiske & Taylor, 1984). It consists of cognitive generalizations about the self that are derived from past experience. Individuals have a self-schema for dimensions that are important to them. Self-schemas represent the way the self has been differentiated and articulated in memory. Having a self-schema for a particular dimension allows a person to quickly filter incoming information about that dimension in social situations. In addition, people with a self-schema for a given attribute also note it in other people. Self-schemas also help individuals to remember relevant information.
2. *Person-schemas.* This type of schema is related to categorization processes. It focuses on trait and behavior information common to certain groups or types of people. Individuals sort other human beings into groups, types, or other categories according to similarities in their essential features. Categories are represented cognitively by prototypes, an abstract set of features commonly associated with the members of a category. In terms of retrieving information from memory, once an observer places a person into a particular category, the observer is likely to misremember the presence of consistent but never seen attributes (Lord & Foti, 1986).
3. *Scripts or event schemas* include knowledge about the typical sequence of events in a given situation. This type of schema corresponds with Louis' (1980) notion of a *cognitive script*, defined as a coherent sequence of events expected by the individual. A script provides knowledge about expected sequences of events and then guides an individual's behavior so that it is appropriate to the given situation (Gioia & Sims, 1986).

4. The final type of schemas is a *person-in-situation schema*, which contains information about people and behavior typically found in social situations. It combines characteristics of both the person and event schemas (Lord & Foti, 1986). Fiske & Taylor (1984) refer to this type of schema as *role schema*.

One type of script or event schemas that individuals hold relates to ***employment relationships***. It can be thought of as *an individual's belief structure of what is expected to occur in the organization and what is expected of him or her*. This schema helps an individual to define what a typical employment relationship entails, and it guides his or her interpretation and recollection of the promises that exist within the employment relationship. For example, how an employee interprets information about employment security within his or her organization will depend on whether security is part of his or her schema for employee-organization relationships in general (Rousseau, 1995; 2001b; Shore & Tetrick, 1994).

Development of Schemas

Schemas develop through *discontinuous processing of information*. Applying this to psychological contracts, it means that contract-related information is sought and processed only at certain times. The mental model of the employment relationship tends to endure until a noticeable signal conveys a break or interruption (Rousseau, 1995).

*Controlled information processing* is used in novel situations where the individual senses something unusual and there is little prior experience to rely upon. Information is actively sought and carefully processed to make a high-quality decision (Lord & Foti, 1986). As experiences with a particular situation accumulate, a mental model or schema about that situation develops upon which individuals tend to rely. This leads to *automatic processing of information*, which demands less attention and which can be applied to several activities simultaneously. Automatic information processing is difficult to alter, or ignore once learned. In familiar situations, it allows individuals to operate with little thought or cognitive strain (Lord & Foti, 1986). Once a schema is formed, there is less review of new facts and circumstances and more reliance on what is already known through automatic information processing. Reliance on schemas simplifies processing, but it also makes a schema resistant to change. This resistance is called *perseverance* and it represents a major feature of schemas: they often persist even in the face of contrary evidence (Fiske & Taylor, 1984).

The construct of a schema or cognitive script suggests that conscious thought is not a very large part of our everyday mode of operating. Fiske & Taylor (1984) propose that people's everyday decisions are made unconscious. In acting that is guided by cognitive scripts, conscious thought is minimal. Schemata or scripts provide the individual with predictions of event sequences and outcomes. As long as the predicted outcomes occur, rational thinking is not necessary.

Research on *cognitive consistency* has shown that people act in ways that preserve their established knowledge structures, perceptions, schemata, and memories (Greenwald, 1980). Cognitive consistency is maintained through selective perception, by seeking out, attending to, and interpreting one's environment in ways that reinforce one's prior knowledge, beliefs and attitudes (Fiske, 1993; Fiske & Taylor, 1984). Fiske (1993) has called this the *expectancy bias*. One aspect of selective perception is selective attention. People tend to seek out and focus on information that confirms prior cognition represented in their schemas, and they tend to avoid or ignore information that disconfirms them. However, when there is a discrepancy between predicted and actual outcomes, the individual is induced to search for explanations for why the actual outcomes occurred and why the predicted outcomes did not (Fiske, 1993). Louis (1980) has called the process through which these retrospective explanations are made ***sense making***.

If we relate the insights from schema theories to ***psychological contracts***, the latter are conceived as relatively robust once formed, and minor discrepancies will be overlooked (Rousseau, 1995; 2001b).

Schemas are built from experience with relevant instances, and they become more abstract, more complex, and more organized with *experience* (Fiske, 1993; Fiske & Taylor, 1984). Several properties of schemas are likely to change with increasing experience. For instance, the schemas of experts contain more characteristics than do the schemas of novices, and mature schemas also become more organized. Through experience, associations among related components are strengthened until the entire schema can be activated (Fiske & Taylor, 1984). Experts also process relevant information more efficiently than novices (Fiske, 1992). Lord & Foti (1986) conclude that schema development progresses along a knowledge continuum from novice to expert level, with experience strengthening the links among related components.

Idiosyncratic Nature of Schemas

Schemas are *idiosyncratic to the person holding them*. This implies that two individuals party to an employment relationship (e.g. an employee and his/her supervisor) may possess very different schemata for what their employment relationship should imply. This creates the potential for incongruence, since both parties' perceptions, interpretations, and memories are likely to be different. Individuals can hold incongruent beliefs about the nature of a promise, or about its fulfillment (Morrison & Robinson, 1997).

Heath, Knez & Camerer (1993) have developed a model for explaining how employees develop beliefs about what they are entitled to receive within the context of their employment relationship. They argue that people are cognitively and motivationally predisposed to form positive views of the content and stability of the employment contract, which leads them to expect their outcomes to be more positive than they are likely to be. They use insights from psychological theories on belief formation to explain the *perception of over-entitlement.* They argue that the way people form beliefs will lead them to see their entitlements to be richer and more systematic than intended by their employers. First, there is a tendency for people to overestimate their contributions in an exchange, thereby leading them to expect a great deal from the other party exactly at the same time that the other party is expecting a great deal from them. Moreover, in the absence of concrete information to the contrary, people tend to assume that others see things like they do and that others value the same things as they do. These tendencies may lead employees to overestimate the amount of motivation and knowledge they share with the other party in a relationship. Second, Heath *et al.* (1993) argue that people's perceived entitlements are more systematic than they should because they may not anticipate exceptional situations where entitlements might change. Due to limited information processing ability, people will generally not anticipate all the unusual situations that may arise in the course of a relationship. Entitlements may also be overly systematic because people may assume too much consistency in the actions of others or the environment. Perceived entitlements may also be too systematic because limited information processing may prevent people from recognizing exceptional situations when they occur.

Choice of Schemas

Given the variety of schemas available for an observer to use, choice of schema is an important issue that can affect perceptions, memory, and behavior. For example, the way subordinates are perceived may be affected substantially by the schema used by their superiors in organizations. According to Lord, choice of schema is a joint function of the target (either the person or the situation) and the perceiver (Lord, 2000; Lord & Foti, 1986). It is affected by the perceiver's goals, recently used information, salient aspects of the target, and differences among perceivers (Lord & Foti, 1986).

1. *Observational goals.* The purpose for which an observer plans to use the information gathered has been shown to affect the processing of information in different ways. For instance, perceivers with different organizational goals will chunk a sequence of behavior differently, store the information differently in memory and retrieve different information from memory.
2. *Priming.* Recently used information will impact on the interpretation and retrieval of information. Priming has to do with the issue of whether previous exposure to a particular schema will affect subsequent

descriptions and evaluations of persons or situations. Priming can have short-term as well as long-term effects.

3. *Salience.* A major type of salience is based on expectations. Salience refers to the issue that a person or event can be salient relative to the perceiver's context and thus become the focus of attention (Fiske & Taylor, 1984). A major consequence of salience is exaggerated perceptions of causality since salience increases the organization and consistency of memory. The more attention an observer pays to another person or to an event, the more his/her impressions will become structured, emphasizing features that fit, and adjusting those that do not.

Schemas and the Concept of Meaning

James & James (1989) refer to the notion of schemas to describe how individuals come to interpret (i.e. make sense of) work environment attributes. They distinguish between two types of meaning. First, *descriptive meaning* focuses on perceptions of the presence or absence of features and structures of environmental attributes. Second, *evaluative meaning* proceeds beyond this description and includes an evaluation of these attributes. James & James (1989) refer to this evaluation process as *valuation*. Valuation refers to cognitive appraisals of attributes in terms of schemas derived from values such as equity. Evaluative meaning is more internally oriented and requires additional information processing to judge how much of a value is represented in or by (perceived) environmental attributes (James & James, 1989: 739).

These two types of meaning can be compared with two facets of the ***psychological contract***: its content (which represents a mental representation or description of the terms being part of the exchange relationship) and its perceived fulfillment (the evaluation of fulfillment, and the balance and reciprocity of these terms).

#### *2.4.3.2. A Social Information Processing Approach to Job Attitudes and Task Design*

Within the social-cognitive domain, a body of literature exists describing how individuals come to develop the schemas they subsequently use for interpreting and evaluating their experiences and their environment. In this sense, Levine, Resnick & Higgins (1993) consider cognition to be a fundamentally social activity. Several decades ago, Salancik & Pfeffer (1978) have developed a social information-processing model that explains *how individuals develop job attitudes within the organizational context.* Since its publication, many scholars, also within the field of psychological contracts, have used this theory to explain diverse aspects of sense making in organizations (e.g. Ho, 1999; Morrison & Robinson, 1997; Rousseau, 1995; Shah, 1998). Salancik & Pfeffer (1978) build on the central assumption that individuals, as adaptive organisms, adapt their attitudes, behaviors and beliefs to their social context and to the reality of their own past and present behavior and situation. Salancik & Pfeffer propose that individuals develop attitude or need statements based on the information available to them at the time they express the attitude or need. There are two important sources of information: (1) the immediate social environment, and (2) past behavior.

The first source of information, an individual's *immediate social environment,* provides social cues he/she can use to construct and interpret events. It also provides information about what a person's attitudes and opinions should be. Furthermore, the social context is likely to make more or less salient some information about an individual's past activities, statements, and thoughts, and also provides norms and expectations, which constrain the process of rationalizing those past activities. The social context has two general effects on attitude and need statements. First, it provides a direct construction of meaning through guides to socially acceptable beliefs, attitudes and needs and acceptable reasons for action. Second, it focuses an individual's attention on certain information and it provides expectations concerning individual behavior and the logical consequences of such behavior. Salancik & Pfeffer (1978) refer to Festinger's (1954) theory of social comparison in explaining that people are motivated to communicate with others and that through this communication, they develop stable, socially derived interpretations of events and their meanings. They consider four ways in which this social influence operates. First, the *overt statements* of others have an impact on an employee's attitude. Second, others *structure an employee's attentional processes,* making aspects of the environment more or less salient. Third,

others provide the employee with *their interpretation* or construction of tasks and events. Fourth, others influence how an *individual interprets what his/her own needs, values, requirements and goals are*. Salancik & Pfeffer do not explicitly explain who those "others" are. Most of the time, they refer to an employee's coworkers.

The second source of information individuals use to construct reality are their *own behaviors*. This is expressed by the term "enactment process". It describes how past behavior influences the way in which an individual comes to perceive and interpret his/her environment. Perception is conceived of as a *retrospective process*: though the experience is immediate, it derives from recall and reconstruction. The process of attributing attitudes from past behavior is in itself influenced by the individual's commitment to the behavior, the information about past behavior that is salient at the time the attitude is generated, and social norms and expectations that influence what can be considered as legitimate or rational explanations for past behavior (Salancik & Pfeffer, 1978).

#### *2.4.3.3. Social Comparison Processes and the Role of Referent Others*

Theories on social comparison processes describe how individuals make use of social information to make sense of their environment. Festinger (1954) was the first to address the inherent drive of individuals to evaluate their perceptions and opinions. He proposed that to the extent that objective, non-social means are not available, people evaluate their perceptions and opinions by comparing them with the perceptions and opinions of others. In evaluating their perceptions and opinions, people will use reference groups that are important to them. Knowledge of others' perceptions and opinions is obtained from direct observation or from third parties (Levine *et al.*, 1993).

Social comparison theory posits that similarity, availability, and relevance are important factors in individuals' selection of social referents (Festinger, 1954). More recently, Shah (1998) has investigated who these social referents are within the context of organizations. Using a *social network perspective*, she argues that employees rely on others to help them evaluate and understand their performance, compensation, career trajectories, and work duties, especially under conditions of uncertainty. She makes a distinction between two types of actors on which individuals can rely. *Cohesive actors* are individuals with close interpersonal ties, or friends. *Structurally equivalent actors* are individuals who share a similar pattern of relationships with others and thus occupy the same position in a network. Structural equivalents provide actors with role-relevant information and are thus an important source of influence. *Socialization* is one influence mechanism of structural equivalents. Shah (1998) empirically demonstrated that employees refer both to structurally equivalent and cohesive referents but that both types of referent groups were used for obtaining different sorts of information. Structural equivalents were mostly referred to for job- or role-related information, while employees primarily relied upon cohesive referents for general organizational information.

Ho (1999) has investigated the existence of various psychological and social bases of comparison employees use in forming judgements for making evaluations of their ***psychological contracts***: employer's promises, employee's normative expectations, coworkers within the organization, and employees outside the organization with a similar job. Her findings suggest that the bases of comparison differ depending on the specific psychological contract terms evaluated. For evaluating their job content, employees most often used their own normative expectations as a referent, while they based their evaluation of relational inducements on the promises expressed by their employer and their evaluation of transactional inducements on a comparison with employees in other organizations.

### 2.4.4. Perspective of Career Development Theories

The fourth perspective we discuss are career development theories. Psychological contracts are developed within the context of the employment relationship but for the employee they have implications that reach further than the boundaries of that specific employment relationship. In Chapter 3 we discuss in more detail how employees'

career expectations and motives are related to the psychological contracts they engage in with different employers during the course of their careers. Here we discuss some of central themes put forward in career theories that are more generally relevant for our understanding of the psychological contract construct.

First we describe the basic propositions of career development theories (section 2.4.4.1), followed by an overview of the major premises of person-environment theories (section 2.4.4.2). In section 2.4.4.3 we elaborate on the issue of reciprocity in career development.

#### *2.4.4.1. Basic Propositions of Career Development Theories*

First we present a definition of a career, followed by a comparison of macro level versus micro level career theories. Subsequently we elaborate on the difference between the subjective and the objective career.

Definition of a Career

Originally, the term career was used to refer to the sequence of work-related positions in a person's working life, from blue-collar workers to professionals and managers. More recently, it has been expanded to cover all major life roles, as well as those that relate to work. Academics now use it to refer to all roles in a person's lifetime (Sullivan, 1999) and to the interaction of factors in the domains of work, family, and leisure throughout that life. Super (1980; 1990) defines the career as *the combination and sequence of roles played by a person during the course of a life-time*. Specifying this to the work context, Arthur, Hall & Lawrence (1989) use the term career to refer to the slowly unfolding sequence of work experiences over time.

Macro Level versus Micro Level Career Theories

At a *macro level*, career theories focus on how both employers' and employees' perspectives on careers have an impact on the nature of the employment relationship and the interaction between both parties. As Sullivan (1999) addresses the issue in his review of the changing nature of careers, changing organizational environments lead to different career patterns like *boundaryless careers* (e.g. Arthur, Inkson & Pringle, 1999; Mirvis & Hall, 1998), or the *protean career,* characterized by lifelong learning (Hall & Mirvis, 1995; Hall & Moss, 1998). These new patters have implications for the nature of the psychological contract between the employee and the organization, such as a different emphasis on opportunities for training and competency management. Based on this perspective, researchers focus on *the changing content of the* ***psychological contract*** *due to changing career patterns and changing formal employment contracts* (e.g. Herriot, 1998; Herriot *et al.*, 1998; Herriot & Pemberton, 1995a; 1995b; Patton, 2001; Sparrow & Cooper, 1998). For instance, Patton (2001: 69) concludes that changes in the future of career – in the way individuals engage in society through work – and in its relationship with other life roles prompt a re-examination of values and personal meanings in role involvement. This re-examination also has implications for the psychological contract.

At a *micro level*, career theories provide insight in the personal values and career motivations of individuals that influence their career attitudes and behaviors and to individuals' career development over time (e.g. Mabey, Clark & Daniels, 1996; Schein, 1978, London, 1983; Sturges, 1999). These insights can be related to *the impact of career-related dispositions and personal values on the type of psychological contract individuals prefer to develop with their employing organization and on their perception of psychological contract fulfillment.* This relationship will be further explored in Chapter 3.

The Subjective and the Objective Career

Inherent in its definition is that a career can be studied from an external or objective perspective and from an internal or subjective perspective (Stephens, 1994). The ***objective career*** refers to the *visible and observable activities and behaviors*, while the ***subjective career*** refers to an individual's attitudes, orientations and perceptions with respect to his or her career (Stephens, 1994). We have already referred to this distinction in

section 2.2.1.2 when we discussed the differences between both types of conceptualizations of the psychological contract.

The objective career refers to the sequence of official positions or jobs an individual takes on during the course of his or her career (Derr & Laurent, 1989; Hall *et al.*, 1997). Changes in income, formal status and titles are central and these are publicly available and have been developed independent of the person (Weick & Berlinger, 1989). This sequence is reflected in the formal or explicit contract between the employer and the employee. On the basis of these sequence of positions, there *is the subjective perception, the cognitive construction and evaluation of the career by the organization and by the employee* (Derr & Laurent, 1989; Hall *et al.*, 1997; Herriot *et al.*, 1996; Ornstein & Isabella, 1993). From a micro-perspective, the central question about career is how people give meaning to their personal career (Ornstein & Isabella, 1993) and to the different career systems like rotation and promotion systems (e.g. Beehr & Juntunen, 1990; Beehr & Taber, 1993; Landau & Hammer, 1986; Stephens, 1994). These subjective experiences refer to the internal expectations, roles, values and aspirations of both parties which are to a great extent implicit and unspoken (Herriot, 1992). They are also related to satisfaction, identity, work attitudes and personal responsibility (Weick & Berlinger, 1989). According to Herriot (1992) *the exchange process which develops between the organization and the employee is the invisible mortal which holds together both parties and which is conceptualized as the* ***psychological contract.*** In this sense, the research tradition on subjective aspects of the career is closely related to the research tradition on the psychological contract, defined at the level of the individual. Both focus on *the subjective perceptions of employees about the terms and conditions of their employment relationship. Perceptions about career development are an important part of these general perceptions.*

#### *2.4.4.2. Person-Environment Fit Theories*

Research on person-environment (P-E) fit has received substantial attention within the career literature (e.g. Bretz & Judge, 1994; Edwards, 1991; Kristof, 1996; Osipow, 1987; Pervin, 1987; Van Vianen, 2000). Researchers within this domain focus on the degree of fit between individual and organizational characteristics and its impact on work-related outcomes. In P-E literature, various types of person-environment fit can be identified. Kristof (1996) distinguishes between four types of fit, which are situated at different environmental levels:

1. *Person-vocation fit*: compatibility between an individual's choice of an occupation and his or her self-concept. This type of congruence is central in career theories developed by Super (see Super, 1990) or Holland (1985). See also Osipow (1987).
2. *Person-organization fit*: compatibility between people and organizations that occurs when at least one entity provides what the other needs, or when they share similar characteristics, or both (Edwards, 1991; Kristof, 1996; Taris & Feij, 2000).
3. *Person-group fit*: compatibility between individuals and their work groups. The definition of work group may range from a small group of immediate coworkers to any identifiable sub-unit of an organization like a functional department or geographic division. According to Kristof (1996), few studies have examined this type of person-environment fit.
4. *Person-job fit*: compatibility between individuals and specific jobs. Edwards (1991) defines person-job fit as the fit between the abilities of a person and the demands of a job or the desires of a person and the attributes of a job. Person-job fit should be judged relative to the tasks performed, not the organization in which the job exists.

Although each of these types of fit has received considerable attention within the literature (for reviews, see Edwards, 1991; Kristof, 1996), research on *person-organization (P-O) fit* is most closely related to the study of the ***psychological contract***. In essence, research on P-O fit concerns *the antecedents and consequences of compatibility between people and the organizations in which they work* (Van Vianen, 2000). Achieving high

levels of P-O fit through hiring and socialization is often seen as the key to retaining motivated employees. More specifically, it is the *needs-supplies perspective on P-O fit* that is relevant for our understanding of psychological contracts. From the needs-supplies perspective, P-O fit occurs when an organization satisfies individuals' needs, desires, or preferences (Kristof, 1996). As Kristof points out (1996: 4): "*Organizations and individuals can be described by what they supply and demand in employment agreements*". These demands and supplies are likely to be influenced by the underlying characteristics of both entities. "*More specifically, organizations supply financial, physical, and psychological resources as well as the task-related, interpersonal, and growth opportunities that are demanded by employees. When these organizational supplies meet employees' demands, needs-supplies fit is achieved. Similarly, organizations demand contributions from their employees in terms of time, effort, commitment, knowledge, skills, and abilities. Demands-abilities fit is achieved when these employee supplies meet organizational demands* (Kristof, 1996: 4). This view on P-O fit is strongly related to the central ideas about the exchange of contributions and inducements within the area of the psychological contract.

Here we further elaborate on one theory on P-O fit which is relevant for our understanding of psychological contracts, namely the Theory of Work Adjustment developed by Dawis & Lofquist (1984).

Theory of Work Adjustment

According to Rounds & Hesketh (1994), the theory of work adjustment is a prototype of theories on person-organization fit since it pays equal attention to the internal motives of the employee and the external motives of the organization. Dawis & Lofquist (1984) provide a structure for classifying individuals and their environment in order to evaluate the relationship between them and to examine adjustment processes of both parties to obtain an improved correspondence between both. The key proposition of their Theory of Work Adjustment (TWA) is that each *individual seeks to achieve and maintain correspondence with his or her environment.* Correspondence occurs when the individual and the environment are co-responsive – that is, work meets the needs of the individual and the individual meets the demands of the work environment. Correspondence is a dynamic process because both the needs of the individual and the demands of the organization change. If correspondence is maintained, the result is job tenure. *Skills, competencies, needs* and *values* are key elements of the theory of work adjustment. These constructs are conceptualized as dispositional variables (traits) and are used to characterize the person (Dawis, 1994). Dawis & Lofquist (1984) propose that correspondence implies that both the individual's work personality structure (work values and talents) and the structure of the work environment (different sorts of reinforcers and competency requirements) are taken into account.

Dawis & Lofquist (1984) thus define correspondence in terms of *the interaction between the work personality and the work environment.* Correspondence is considered as a *reciprocal relationship* in which the work personality and work environment are mutually responsive, with the individual fulfilling the requirements of the work environment and the work environment fulfilling the requirements of the individual. Attaining work adjustment is then the continuous and dynamic process by which the individual seeks to achieve and maintain correspondence with the work environment (Dawis & Lofquist, 1984). The resulting work adjustment, defined as tenure on the job, is postulated to be a function of two characteristics of the employee in interaction with his work environment: (1) satisfactoriness and (2) satisfaction. *Satisfactoriness,* or the extent to which an individual is able to be successful in his or her job, is assumed to be a function of the correspondence between the individual's abilities and the ability requirements of the job. It refers to *the work environment's satisfaction with the person. Satisfaction* is defined as affect – feeling or emotion – resulting from the *person's evaluation of the situation* (Dawis, 1994). It is assumed to be a function of the correspondence between the individual's vocational needs or values and the reinfocer systems of the work environment. Both are closely related to ***psychological contract*** theory. The former (satisfactoriness) relates to the organizational perspective on the psychological contract, the latter (satisfaction) relates to the employee's perspective.

The TWA distinguishes between four individual *personality style variables*, that characterize the *feature's of the person's interaction with the environment*: (1) celerity, (2) pace, (3) rhythm, and (4) endurance. *Celerity* is

defined as the speed of initiating interaction with the environment; *pace* is the intensity (or activity level) of the interaction; *rhythm* refers to the pattern of the pace of interaction (whether steady or cyclical or erratic); and *endurance* refers to the sustaining of interaction (Dawis, 1994). Dawis concludes that people with the same abilities and values, can differ in their behavior and therefore in their behavioral outcomes as a function of differing personality style.
Furthermore, different individuals also have different styles, called *adjustment style* variables: (1) flexibility, (2) activeness, (3) reactiveness, and (4) perseverance. *Flexibility* refers to individual differences in tolerance for discorrespondence before doing something to reduce it. The extent to which an individual reacts to discorrespondence by attempting to act upon the environment is called *activeness*, while the extent to which he or she attempts to change self to reduce discorrespondence is called *reactiveness*. *Perseverance* is defined as the length of time an individual will remain in a situation of discorrespondence. These adjustment patterns describe the continuous reciprocal interaction between the individual and his environment in search for work adjustment (Bretz & Judge, 1994).

Within the ***psychological contract*** framework, *matching constructs* discerned within P-E theories deserve further attention. The matching constructs used in TWA are *work values* and *abilities* on the person side of the P-E equation and *reinforcer factors* and *ability requirements* on the environment side. In this respect, the *type of contract* is explicitly mentioned as a matching construct. This contract, or the *psychological contract* within our view, is a matching construct that can be used for investigating how individuals and organizations realize congruence between their respective needs. Herriot (1992) points out that not the static effects of characteristics of the person and the environment, but rather the *processes of social negotiation* by which both parties adjust their expectations to achieve a workable level of congruence are highly relevant for our understanding of psychological contracts. In order to obtain person-organization fit, it is not necessary to focus exclusively on matching individual dispositions with the organization through effective recruitment and selection systems. This can also be realized by matching an individual's expectations with those of the organization through the development of a mutually understood psychological contract.

#### *2.4.4.3. Reciprocity and the Career*

Most career theories assume that a career is not only shaped by the individual nor by the organization but that it is the result of an interaction between both parties (Herriot, 1992). Career theorists stress that organizations who want to develop a long-term relationship with their employees, have to take into account their employees' expectations, perceptions and values and to make them correspond with organizational expectations (Orpen, 1994). In this respect career theories focus on how both the organization's and the individual's perspective on the career have an impact on the interaction between both parties and on the nature of their employment relationship (e.g. Campion, Cheraskin & Stevens, 1994; Noe, 1996; Orpen, 1994). This interaction between individual and organization is also a central element in ***the psychological contract*** literature.

Orpen (1994) distinguishes between individual and organizational career management. ***Organizational career management*** refers to the policies and activities the organization develops in order to improve the effectiveness of its employees. ***Individual career management*** refers to the personal efforts of employees to realize their career objectives. According to Orpen (1994), it is important that there is sufficient correspondence between both. According to the model of psychological success developed by Hall & Foster (1977), employees are active agents who use the organizational career management system to realize their personal career objectives. These authors state that it is the task of the organization to ensure that this process also results in the realization of organizational objectives.
Noe (1996) describes career management as the processes through which employees collect information about their values, interests, strengths and weaknesses (career exploration), based on which they can determine their career objectives and develop career strategies which increase their chances for obtaining their goals. From the

perspective of the organization, career management is important since it is assumed to improve the commitment and performance of employees (Noe, 1996).

Arthur & Kram (1989) use the term *reciprocal adaptation* to describe the adaptation of individuals and organizations to each other. They apply the concept of reciprocity to *a three-stage model of the individual career* and consider the associated individual needs and behaviors in light of *stage-based views of organizational development*. Based on this comparison, they propose a framework for matching individual and organizational needs. According to Arthur & Kram (1989), *individual needs change as careers unfold*. They distinguish three consecutive stages: (1) *early career* (ending in the early to mid-thirties), (2) *middle career* (usually lasting until the middle to late forties), and (3) *career maturity* (going on to around the early or middle sixties). Individual needs shift with career stages and associated behaviors change as needs are being met.

The *early career stage* is characterized by a *need for exploring*. In return for their early career experiences, people frequently offer the organization a high level of energy for work. The essential concern is with "doing" and demonstrating competencies in occupational or technical roles. Optimism and a willingness to trust organizational and occupational seniors usually accompany this high level of energy for work. The behavior associated with this period is called "exuberance" (Arthur & Kram, 1989).

During their *middle career years*, individuals have developed some focus on the career goals they want to pursue. They are clear on their career anchors and they are most concerned with personal advancement, spanning both work and community. They seek out opportunities to be visibly successful. Jobs mediate between individuals and their organizational contexts (such as the nature of promotional opportunities, rewards and assignments) to shape the exposure and recognition sought. The dominant individual need is called "advancing". In return, their concerns with "climbing the ladder" can foster an intense desire for organizational success. This desire is conditional on the opportunity for members to associate their own advancement with organizational achievement. The behavior associated with this period is called "directedness" (Arthur & Kram, 1989).

During the *mature career years*, individuals are generally faced with the tasks of securing and maintaining their emergent status, experiencing continued affirmation of their work and passing on the benefits of their learning and experience to others. The individual need associated with this stage is called "protecting". From the organization's perspective, it is a fundamental concern that the skills and knowledge developed so far continue to be relevant, accessible and useful. Arthur & Kram call the behavior associated with this period "stewardship" (1989: 295).

There could be a relationship between the dynamism of careers and the dynamism of the ***psychological contract***. At the beginning of the career, people's needs and expectations evolve very much around "self-tests". They need to learn whether they can, in fact, contribute to an organization, whether they have the skill and strength to do certain kinds of work, whether they can make a contribution (Schein, 1971; 1978). Both individual employees and organizations derive their expectations towards their employment relationship from their inner needs, what they have learned from others, traditions and norms, their own past experience and many other sources. As needs and external forces change over the course of the individual's career, so do these expectations. Schein concludes that these changing expectations will affect the individual's psychological contract.

### 2.4.5. Conclusions

In this section we have discussed four theoretical perspectives that are relevant for improving our understanding of the psychological contract construct. While the psychological contract is an applied construct in that it is used to explain individuals' perceptions, attitudes and behaviors in work settings, its fundamental mechanisms are derived from these more basic and long-standing research traditions. From the *economic transaction perspective*

we have learned that subjectivity is inherent in all relational employment contracts. Thus the subjective goals and personal interests of contract parties and how these affect their contractual behaviors cannot be denied when studying employment relationships. From the *social exchange perspective* we have learned in more detail how these contractual behaviors are affected by the central principles of reciprocity and balance and how individuals' expectations form a frame of reference against which these exchanges are perceived and evaluated. From the *social cognitive perspective* we have learned that the subjectivity inherent in psychological contracts exists because individuals' psychological contract perceptions are cognitive schemas they develop about their employment relationship and that these schemas affect subsequent information processing and decision making. Finally, the *perspective of career development theories* has learned us that the psychological contract as it develops within the context of one specific employment relationship cannot be separated from individuals' general career motives and that the match between individual and organizational goals relates to the perceived match between contributions and inducements, i.e. the psychological contract.

## 2.1. Summary and Conclusions

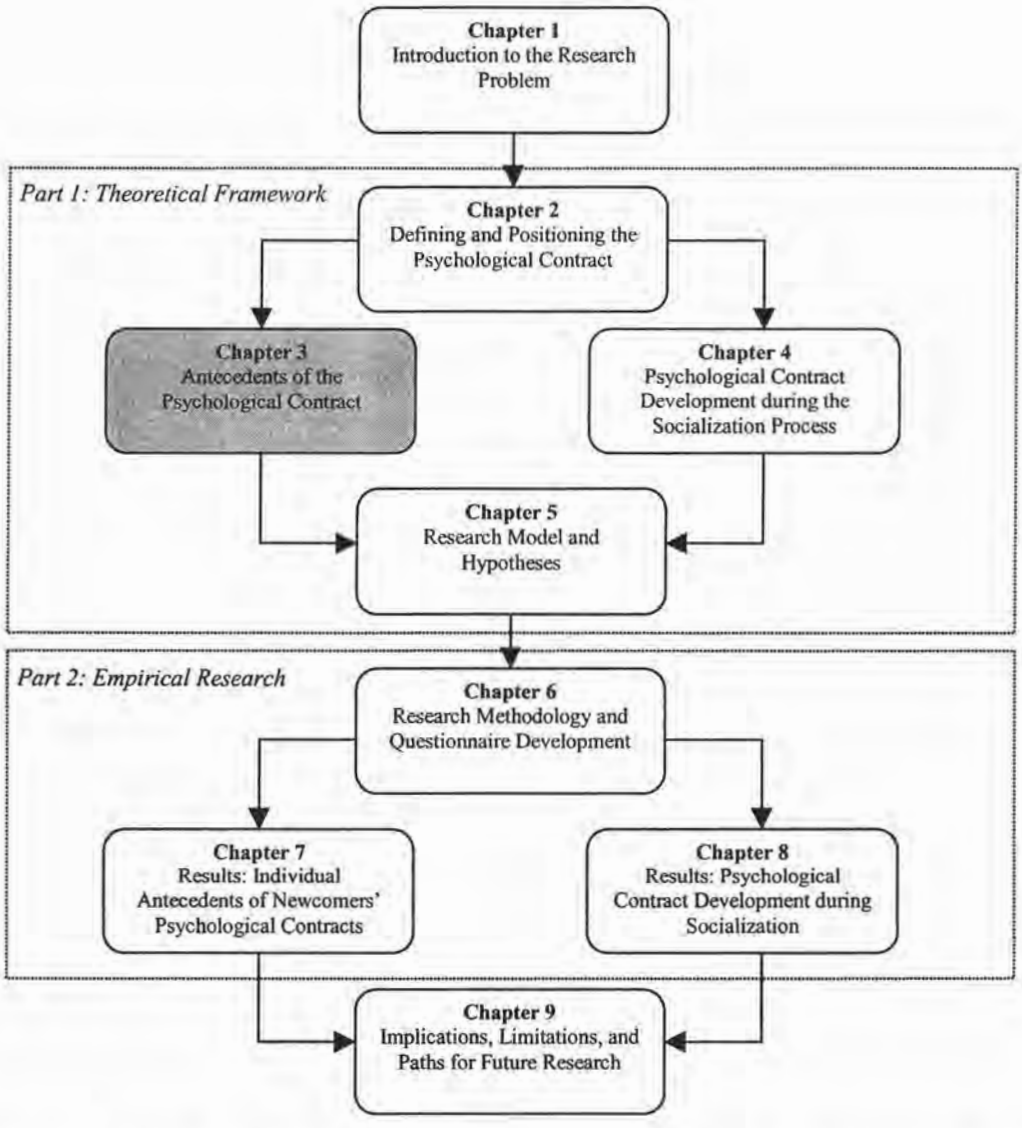
The aim of this chapter was to provide a better insight into the meaning of the psychological contract. Therefore we first elaborated on the definition of the psychological contract and on its conceptualization as a multi-faceted construct. The empirical validity of the construct was demonstrated by summarizing the empirical evidence on the relationship between the psychological contract and outcome variables. A shortcoming in much of the psychological contract research is the diversity in definitions and conceptualizations at the theoretical level and in operationalizations at the empirical level. This is mainly due to the fact that apart from the seminal work by Rousseau (1989; 1995) the research area is characterized by too much ad hoc studies without embeddedness within a commonly accepted conceptual and theoretical framework. We have tried to overcome this shortcoming by further describing the psychological contract from the perspective of four major theoretical streams that provide relevant information for improving our understanding of the construct.

Despite this diversity in approaches among psychological contract researchers, there is consensus on one central feature of the psychological contract, namely its subjectivity. Psychological contracts exist in the eyes of the beholder and thus researchers all concentrate on individuals' (employees or organizational agents) subjective perceptions about the terms of the employment relationship as the central variable. In this respect, psychological contract research is guided by two principles prevalent in most applied psychological research, as outlined by James & James (1989: 739): "*Individuals respond to environments in terms of how they perceive them and the most important component of perception is the meaning or meanings imputed to the environment by the individual.*

The empirical evidence on the role of the psychological contract in explaining employee attitudes and behaviors calls for a further examination of the factors affecting its formation and of the processes of psychological contract development over time, i.e. the two central research questions in this thesis. Hence, in the following chapters we elaborate on theories and empirical research that is relevant for formulating hypotheses regarding both questions. In Chapter 3 we elaborate on the antecedents of the psychological contract. In the subsequent chapter, Chapter 4, we discuss theories and research relevant for improving our understanding of psychological contract development.

## CHAPTER STRUCTURE

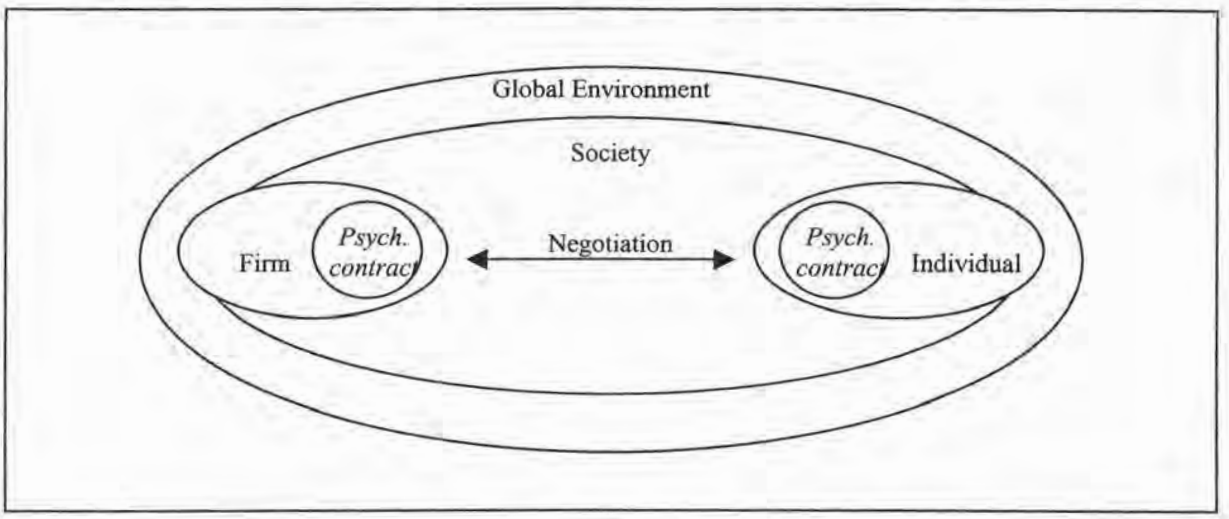
# Chapter 3
# Antecedents of the Psychological Contract




*It is the objective of this chapter to provide the reader with an overview of major theoretical and empirical contributions relating to the antecedents of employees' psychological contracts. According to Rousseau & Schalk (2000) these antecedents are situated at the societal, organizational and individual level (Figure 3.1). We start with a brief discussion on the role of societal factors in psychological contracts (section 3.1). Subsequently we summarize the organizational factors that are expected to affect psychological contracts (section 3.2). In the third section we elaborate in detail on the individual antecedents of the psychological contract (section 3.3), since this is the major focus of the first research question we address this thesis*[i]*. Finally, in Section 3.4 we draw some major conclusions about the antecedents of newcomers' psychological contracts based on the insights obtained from this literature review.*

[i] A theoretical paper on the role of work values as antecedents of newcomers' psychological contracts has been published: Buyens, D., & De Vos, A. (2002). Making sense of the Employment Relationship: Work Values and Information Seeking as Antecedents of Psychological Contract Development among Organizational Newcomers. In P. Vlerick, F. Lievens & R. Claes (Eds.), *Mens en Organisatie. Liber Amicorum Pol Coetsier*, Gent: Academia Press.

Figure 3.1: Key Context for Psychological Contracting (adapted from Rousseau & Schalk, 2001: 2).




## 3.1. SOCIETAL ANTECEDENTS (MACRO-LEVEL)

The society within which employees and organizations engage in employment relationships provides the context in which psychological contracts are formed. This context defines boundaries to the psychological contract and affects both parties' psychological contract perceptions and evaluations (Rousseau & Schalk, 2000). Depending on regulations existing at the societal level, employees and organizations have different zones of negotiability in their employment contracts and this will also affect their psychological contracts. For example, in societies where issues like working hours, national holidays, or pension-benefits are extensively regulated at the national level, there is only a narrow zone of negotiability left for organizations and employees. Other aspects that can be different at the societal level are the freedom of contracts, employment protection, the relative power of the state, the existence of a market economy, and collective bargaining (Rousseau & Schalk, 2000). It implies that much of what organizations promise to their employees derives from societal stipulations regarding employment *per se*, not from a particular employment relationship. These societal boundaries are extensively discussed in the book on cross national perspectives on psychological contracts, edited by Rousseau & Schalk (2000). Based on their comparison of psychological contracts in thirteen different countries, Rousseau & Schalk (2000) conclude that there are differences between psychological contracts in these countries, which are related to the following factors: the *meaning* of promises, the *willingness* of employees and organizations to rely on each other's promises, and the *array* of promises that are exchangeable within a given employment context (i.e. the zone of negotiability). Other factors that operate at the level of society and that affect the perception of mutuality in psychological contracts are the extent to which *conflicts* are institutionalized in a society, the existence of *social differences* between parties and the possibility of parties to *influence* the terms of employment. This summary of societal antecedents of the psychological contract is based on a theoretical comparison of detailed descriptions of psychological contracts in these thirteen countries. However, as to date we are aware of no empirical studies that explicitly take a cross-national view on the psychological contract by empirically comparing psychological contracts within different societies.

## 3.2. ORGANIZATIONAL ANTECEDENTS (MESO-LEVEL)

*"Psychological contracts are tied within the context of the employment relationship: individuals cannot separately create psychological contracts, but they develop as an inescapable result of the interaction between the parties"* (Anderson & Schalk, 1998: 640).

The organization is proposed to influence employees' psychological contracts through messages conveyed by multiple agents, organizational actions, and expressions of organizational policy (e.g. through handbooks, compensation systems or other personnel-related structures). Rousseau (1995; Rousseau & Wade-Benzoni, 1994; 1995) considers two important groups of message senders: primary contract makers and secondary contract makers. The first category, ***primary contract makers***, also called *human contract makers*, are organizational agents like managers, human resource professionals and mentors, who influence the psychological contract through their interactions and communications with the employee. The second category, called ***secondary contract makers*** or *administrative contract makers*, refers to organizational systems and procedures providing information to the employee, namely human resource activities like compensation, evaluation systems and career planning. Closely related to this second type of contract makers are organizational policies regarding legal employment contracts. We will successively discuss both types of contract makers in the following sections: section 3.2.1 contains a discussion of the role of human contract makers, section 3.2.2 contains a discussion on the role of administrative contract makers. In section 3.2.3 we elaborate on the role of legal employment contracts.

### 3.2.1. Human Contract Makers: Organizational Agents

Shore & Tetrick (1994) consider three groups of organizational agents who send messages to the employee: (1) *recruiter*, (2) *coworkers* and (3) the *direct supervisor*.

Prior to organizational entry the ***recruitment officer*** is proposed to affect the psychological contract of future employees because promises expressed by the recruiter will give rise to expectations that employees will have about their future relationship with the organization (Guzzo & Noonan, 1994; Shore & Tetrick, 1994). This implies that recruiters can be considered as an important organizational agent affecting the psychological contract of newcomers in the organization. Within the context of the psychological contract, we are aware of no empirical research that has explicitly assessed the role of the recruiter in the psychological contract.

After organizational entry, ***coworkers*** are assumed to play an important informational role since these are the employees with whom the focal employee interacts most frequently. Coworkers communicate norms and standards, they provide impressions about the workplace and they help the newcomer understanding what is going on at work. Building on social information processing theory (Salancik & Pfeffer, 1978), Rousseau points out that this social information has powerful effects on newcomers' perceptions of their employment relationship. In their study on the absence culture and the psychological contract, Nicholson & Jones (1985) describe how employees influence newcomers' absence behavior by providing social cues communicating the absence culture existing within the work group.
Newcomers' psychological contracts will be affected by co-workers through *direct communication* or by *monitoring* what these coworkers receive and how they are treated by the organization (Ho, 1999). More senior employees will also rely on coworkers for their psychological contracts, more specifically when they evaluate the fulfillment organizational promises. According to Ho (1999), coworkers are a relevant reference group because of their similarity to the focal employee in terms of performing the same job. Ho (1999) empirically demonstrated that employees based their evaluation of psychological contract fulfillment on their perceptions of the inducements received by their coworkers. The greater the amount of inducements received by these coworkers relative to the inducements received by the focal person, the greater the likelihood of a perceived breach of psychological contract.

Concerning the impact of the employee's ***direct supervisor***, studies demonstrate that employees' evaluations of the quality of the exchange relationship with their supervisor have an impact on their evaluation of the psychological contract. In two separate studies, Lewis-McLear & Taylor (1997; 1998) found that a positively experienced relationship with the supervisor decreased the likelihood of perceived psychological contract breach.

At the theoretical level, Morrison & Robinson (1997) state that a high-quality leader-member exchange relationship facilitates communication between an employee and his or her supervisor, thereby reducing the probability of the perception of contract breach by the employee. Both Rousseau (1995) and Shore & Tetrick (1994) argue that the direct supervisor also plays an important role in the development newcomers' psychological contracts. However, until now these propositions have not been examined at the empirical level.

To sum up, although each of these organizational agents is proposed to affect employees' psychological contracts, as to date only little empirical evidence exists that empirically supports these relationships. To enhance further theory building and empirical research on the role of organizational agents in the psychological contract, researchers could base their theories and research designs on other relevant research traditions, for example the research on recruitment, on leader-member exchange and on socialization research about the role of organizational agents in newcomer socialization. We will come back to the latter when we discuss the issue of psychological contract development during the socialization period in Chapter 4.

### 3.2.2. Administrative Contract Makers: Human Resource Policies and Practices

Several scholars stress the importance of human resource (HR) practices as being one of the major factors through which employees learn to understand the terms of their employment relationship (Grant, 1999; Guest & Conway, 1997; 1998; Guzzo & Noonan, 1994; Rousseau, 1995; Rousseau & Wade-Benzoni, 1994; 1995). HR-practices convey messages to employees about the expectations the organization has towards them and about the rewards they can expect in return (Rousseau & Greller, 1994). Not the objective practices, systems and procedures as such, but the way they are perceived and interpreted by the individual, will influence the employee's psychological contract (Guzzo & Noonan, 1994).

The following HR-practices have been discussed in relationship with the psychological contract: (1) *recruitment and socialization*, (2) *performance management*, and (3) *career development*. Other authors have studied the impact of HR-practices at a more general level.

Kotter (1973) and Schein (1978) have both described how employees and organizations exchange their expectations regarding the employment relationship during the recruitment process and early during organizational entrance. For understanding newcomers' psychological contracts, recruitment and socialization practices are particularly relevant. However, as to date, no empirical work has explicitly addressed the impact of organizational ***recruitment and socialization practices*** on new employees' psychological contracts. We come back to the role of socialization practices when we discuss the issue of psychological contract development in Chapter 4.

Two studies provide indirect evidence for the relationship between employees' experiences with the organization's ***performance management system*** and their psychological contracts (Fletcher & Williams, 1996; Stiles *et al.*, 1997). The results show that employees who are positive about the implementation of a new performance management system evaluate their psychological contract as more positive than employees who make up a negative evaluation of the performance management system.

Some scholars have investigated the relationship between the organization's ***career development and training policies*** and employees' psychological contracts. (e.g. Martin et al., 1998 ; Herriot *et al.*, 1998; Herriot & Pemberton, 1996). For instance, Peter Herriot and his colleagues have investigated how the organization and the individual go through a contracting process about the employee's developmental opportunities within the organization and the kind of contributions that are required from him/her in return. These scholars argue that the more clearly both parties communicate their respective expectations, the more their psychological contract will be based on mutual understanding, thereby decreasing the likelihood of a negative psychological contract

evaluation (Herriot *et al.*, 1998; Herriot & Pemberton, 1996). In these studies, the *content* of the practices relating to career development as such have not been studied, but only the *process* of interaction and communication about career development.
In a recent study about the relationship between organizational career development practices and the psychological contract conducted within our research group, we found that employees' perceptions and evaluations of career management practices offered by their organization affected their psychological contract perceptions. Employees who perceived that their organization offered more possibilities and more support with respect to their careers, also believed that the organization had made more promises to them about their career development. They also generally made up a more positive evaluation of their psychological contract and more specifically they were more positive about the fulfillment of organizational promises relating to career development (Buyens *et al.*, 2002). These results show that not only the interaction and communication with respect to career development, but also the type of HR-practices that are in place, affect the psychological contract.

At a general level, Guest & Conway (1997; 1998) have studied the impact of employees' perceptions of ***progressive HR-activities***, and of an organizational climate characterized by strong involvement and participation, on employees' psychological contract perceptions and evaluations. Progressive HR-activities were operationalized as follows (Guest & Conway, 1997): (1) equal opportunities practices, (2) training & development opportunities, (3) communication, (4) internal recruitment, (5) performance appraisals, (6) active involvement in decision-making, (7) efforts to make jobs interesting and varied, (8) actively trying to avoid compulsory redundancies and layoffs, (9) facilities to help employees deal with non-work responsibilities, and (10) pay for performance. For each practice, respondents had to answer whether it was in place in their organization. Reponses were summed up and it was assumed that the greater the number of practices to be in place, the more progressive are the organization's human resource policies and practices. The authors found that these practices positively affected employees' evaluations of contract fulfillment.
In a related study, Guest *et al.* (1999) also found that a positive psychological contract was strongly associated with a greater experience of progressive human resource practices. They conclude that the psychological contract is largely shaped by the organization's human resource policies. However, these studies only focus on the relationship between HR-activities and the *evaluative facet* of the psychological contract. Further research is needed to assess whether these activities also shape the content and features of employees' psychological contracts.

With respect to the *psychological contract content*, in a representative survey among Flemish employees, Van den Brande (2002) recently found evidence for the impact of HR-practices on employees' perceived entitlements from the organization and on their perceptions of what they should contribute to their organization. Seven types of HR-practices were studied: (1) participation, (2) training policy, (3) internal recruitment, (4) pay for performance, (5) pay for seniority, (6) job variety, and (7) job autonomy. Three of these practices, namely a policy of participation, job variety and pay for performance, had a significant effect on employees' psychological contracts. These HR-practices not only affected employees' expectations towards their organization but also their perceptions of their own contributions. For example, participation was not only positively related to employees' perceived entitlements relating to personal treatment by the organization but also to perceived employee obligations relating to loyalty, flexibility, and personal investment in the organization. However, no evidence was found for the impact of the other types of HR-practices. Based on the findings of this study it remains unclear what could explain the differential effects of the seven HR-practices involved. But it suggests that it is relevant to distinguish between different types of HR-practices in future research, instead of simply adding them into one composite scale of progressive HR-practices as done in the studies by Guest and his colleagues (Guest & Conway, 1997; 1998; Guest *et al.*, 1999).

With respect to *psychological contract features,* Guzzo & Noonan (1994) propose that the proportion of relational versus transactional elements within the psychological contract depends on the HR-practices the

organization provides. Those practices that are limited to very basic, work-related needs and that fulfil the explicit, formal part of the employment contract should contribute to the transactional aspect of the psychological contract. Practices that go beyond the employee's basic needs, that reach into multiple aspects of the employee's work and non-work life, and that are not spelled out in the employment agreement should contribute to the relational portion of the psychological contract. However, they have not investigated the validity of their propositions at the empirical level.

As with the influences of organizational agents, as to date no comprehensive empirical evidence exists for the relationship between human resources policies and practices and the psychological contract. Moreover, a weakness that is common to the studies reported here is that they all draw on perceptual measures. Employees reported both on their psychological contract perceptions or evaluations and on their perceptions of HR-practices. This implies that the relationships between both could also be due to common method variance, so it is important for future research to use multiple sources for assessing HR-practices or to employ more objective measures.
In further theory building and design of empirical studies addressing the impact of HR-practices it could be useful for psychological contract researchers to use theories and empirical data from related research traditions. Relevant perspectives are, for instance, the research on perceived organizational support and research on the different functional areas of human resources management like recruitment, socialization, career development or performance management. In Chapter 4 we do this more specifically for one functional area, namely socialization policies and practices.

### 3.2.3. Relationship between the Legal Employment Contract and the Psychological Contract

Although the legal employment contract can be considered as an individual-level antecedent, we discuss it in a separate section because it explicitly relates the individual and the organization and because it is affected by the organizational strategy with respect to the employment contracts the organization wants to have with diverse groups of employees. In the legal employment contract, diverse kinds of agreements and promises are stipulated on which employees will base their psychological contracts (Shore & Tetrick, 1994). According to Shore & Tetrick (1994) the formal contract can affect the psychological contract in several ways. It does not only play an important role in making explicit certain terms of the employment relationship, but it also defines its statute and duration. According to Rousseau (1995) and Rousseau & McLean Parks (1993), both employment statute and duration of the employment relationship are related to employees' psychological contract *features*. They propose that contingent employees and part-time employees develop a more transactional psychological contract than permanent and full-time employees do. McLean Parks *et al.* (1998) further elaborated on this distinction and argue that the psychological contract of contingent employees is less dynamic, more narrow in scope and more tangible than that of traditional employees.

Recently, several researchers have empirically investigated the relationship between the legal employment contract and the psychological contract. More specifically they have assessed the impact of (1) duration of the employment contract, and (2) employment statute on the psychological contract (e.g. Conway, 1999; Freese & Schalk, 1996; Guest *et al.*, 1998; Guest *et al.*, 1999; Coyle-Shapiro & Kessler, 2002; McLean Parks *et al.*, 1998; Millward & Brewerton, 1999).

A number of studies address the relationship between the ***duration of the legal employment contract*** and the psychological contract. Millward & Hopkins (1998) empirically demonstrated that permanent employees were clearly more relational in their contractual orientation than were temporary employees, while temporary employees were significantly more transactional in their contractual orientation than were permanent employees. Millward & Brewerton (1999) focused in more detail on three types of contingent workers (permanent agency contractors, temporary agency contractors, and direct employees with fixed-term contracts). They found that

employees with fixed-term contracts were the least transactional in their psychological contract compared with both types of contractors (no difference between both types of contractors was found). On the other hand, both permanent contractors and fixed-term employees were more relational oriented compared with temporary agency contractors.

Guest *et al.* (1998) and Guest *et al.* (1999) have presented research results that are at first sight in contradiction with these findings. In both studies, being on a fixed-term contract was associated with a more positive evaluation of psychological contract fulfillment. Guest *et al.* explain this finding by arguing that the psychological contracts of temporary employees might be (or might be perceived as being) in balance better than those of permanent employees. Secondly, it could be the case that more transactional employment deals are more clearly negotiated and/or understood between employers and temporary workers, with less scope for violation of the psychological contract arising from misunderstandings. If the latter explanation holds, then these findings are not in contrast with the results about the impact on psychological contract features reported by Millward & Hopkins (1998) and Millward & Brewerton (1999).

A recent study by Coyle-Shapiro & Kessler (2002) integrates both aspects. These authors assessed how three groups of employees in a public sector workplace, namely permanent, fixed term and temporary staff, viewed their exchange relationship with their employer and how they responded to the inducements received from their employer. In their study contingent employees (both fixed term and permanent staff) were less committed to the organization and they engaged in organizational citizenship behavior (OCB) to a lesser degree than permanent employees. These employees also perceived fewer employer obligations and also reported to receive fewer employer inducements. On the other hand, the relationship between inducements provided by the employer and OCB was stronger for contingent employees. The first findings suggest the existence of a more transactional psychological contract among contingent employees. Relating the second finding to the studies conducted by Guest and his colleagues, it suggests that contingent employees not only are more likely to make up a positive evaluation of psychological contract fulfillment but also that, when they do this, they are more likely to reciprocate on what they receive from their employer than permanent employees do.

Other researchers have investigated the relationship between ***employment statute*** and the psychological contract. Millward & Brewerton (1998) found that full-timers scored significantly higher on relational psychological contract orientation than part-timers did. Freese *et al.* (1999) found differences in employees' perceptions of psychological contract breach depending on the number of hours they worked according to their formal contract. Part-time employees were more likely to experience psychological contract breach than full-time employees. These findings correspond with a previous study conducted by Freese & Schalk (1996) (see also Schalk *et al.*, 1995), demonstrating differences in the psychological contract of part-time versus full-time female employees and employees with supervisory tasks. Part-time female employees and part-time employees with supervisory tasks made up a significantly more negative evaluation of psychological contract fulfillment than full-time female employees and full-time employees with supervisory tasks respectively.

In addition to the differences in psychological contracts due to formal employment statute and duration, the ***stipulations*** made in the formal employment contract and the ***zone of negotiability*** which is left for individual employment arrangements should also affect the psychological contract (Rousseau & Schalk, 2000). If an organization is intolerant for differences between individuals then there will be greater homogeneity among its employees and there will be fewer possibilities for individual interpretation of contract terms. As a consequence, the psychological contract of these employees will be less idiosyncratic and more comparable, making it more a normative contract (i.e. shared understandings regarding the terms of employment within a particular work unit) than a psychological contract (Rousseau, 1995). Another consequence is that the psychological contract will be more closely related to the formal employment contract (i.e. more beliefs that are based on promises made explicitly and even formally). However, as to date this relationship has not been empirically addressed.

Together the findings reported in this section indicate that how employees perceive their relationship with their organization is affected by the formal characteristics of this relationship. Rousseau (1995) has outlined how the organization's ***overall contract-related strategy*** affects employees' psychological contracts. Based on the typology of organizational strategies developed by Miles & Snow (1984), she relates the four strategic types of organizations (defenders, prospectors, analyzers and responsives) to four types of human resource strategies, including a strategy regarding preferred types of employment contracts.

Table 3.1: Relationship between Organizational Strategy, Human Resource Strategy, Contracting Policy and the Psychological Contract (adapted from Rousseau, 1995: 184-186)

| ORGANIZATIONAL STRATEGY | Defender | Prospector | Analyzer | Responsive |
|---|---|---|---|---|
| HUMAN RESOURCES STRATEGY | Make | Buy | Make and buy | Make with buy |
| CONTRACT POLICY | Long term contracts | Short term contracts Contractors | Mixture of short term and long term contracts | Core: long term Peripheral: short term / contractors |
| PSYCHOLOGICAL CONTRACT | Relational | Transactional | Both relational and transactional | Core: Relational Peripheral: transactional |

Summarizing the evidence on the relationship between the formal contract and the psychological contract, we conclude that this relationship is one of the themes that has received most empirical attention within the psychological contract literature. Empirical findings indicate that employees differ in their psychological contract perceptions depending on the characteristics of their legal employment contract. This relationship could be further explained by relating it to the organization's strategic orientation with respect to employment contracts, but further empirical research is needed to improve our understanding of the role of the latter.

The existing findings also provide evidence for the distinctive nature of the psychological contract and the legal contract and they suggest that the relationship between both is more complex than what would be expected at first sight. For example, the fact that contingent employees have more transactional psychological contracts but at the same time are more positive about psychological contract fulfillment suggests that these employees' attitudes towards their employment relationship are not negatively affected by their short-term contracts. Rather, due to the nature of their legal contract they appear to have more clarity about what they can expect and therefore report having a more positive psychological contract.

We might expect that the impact of the legal contract is also apparent when we focus on newcomers' psychological contracts, since at organizational entry these contractual stipulations are one of the very few sources of information upon which newcomers can rely to build their perceptions of their employment relationship.

### 3.3. INDIVIDUAL ANTECEDENTS (MICRO-LEVEL)

The explicit focus of this thesis is on the individual antecedents of newcomers' psychological contracts. Therefore we will elaborate in more detail on this group of antecedents. The psychological contract is perceptual, unwritten, and hence not necessarily shared by the other party to the exchange relationship (Rousseau, 1995). Consequently, employers and employees may hold different views on their psychological contract and part of these differences could be explained by individual factors. However, until now only partial attempts have been made by psychological contract researchers to investigate the individual antecedents of the psychological contract. We therefore base our discussion of individual antecedents on theories and findings in related research traditions.

The role of individual dispositions is a long-standing theme in organizational behavior research and they still receive substantial attention within the contemporary literature (e.g. Judge & Bono, 2001; Judge, Bono & Locke, 2000; Roberts & Hogan, 2001). The four theoretical perspectives for understanding psychological contracts we have discussed in the previous chapter also build on the central assumption of subjectivity and therefore they all consider – to a greater or lesser extent – the role of individual dispositions. Departing from these four research traditions we will discuss here the role of individual dispositions and we relate these insights to the psychological contract. Within the ***economic transaction perspective***, there is no explicit theory development on the role of individual dispositions but the central focus on principal – agent relationships in agency theories and transaction cost theories suggests that individuals' personal motives and self-interests play a major role in their contracting behaviors. The ***social-cognitive perspective*** clearly articulates the importance of individual dispositions in social perceptions and schema development. Within this research tradition, it is a central assumption that schemas are idiosyncratic to the person holding them and that individual factors like goals and dispositions affect schema development. Existing work in this area has addressed several types of individual dispositions like self-efficacy and personal goals in relationship with social perception and schema development. The theories we discussed with respect to the ***mutual adjustment perspective*** also pay much attention to individual dispositions. For instance, career theories stressing the subjective nature of careers have paid major attention to individual factors like values, personality and goals. Finally, although the ***social exchange perspective*** initially only focused on the situational characteristics of interaction (i.e. characteristics of the other party's behavior influencing the focal person's behaviors), researchers in this area have come to realize that personal factors also play a role in employees' sensitivity for and reactions to the norm of reciprocity and balance in exchange relationships.

In this section we start with a discussion of the role of individual motivations and goals in schema development as it has been studied within social-cognitive research (section 3.3.1). In section 3.3.2 we summarize the individual characteristics that have received attention within the psychological contract literature and we relate these to some classifications of individual characteristics that have been put forward in the organizational behavior literature. Building on these insights, we subsequently elaborate on four types of individual characteristics that could affect employees' psychological contracts, namely work values (section 3.3.3), career strategy (section 3.3.4), locus of control (section 3.3.5), and exchange orientation (section 3.3.6).

### 3.3.1. The Influence of Individual Motivations and Goals on Schema Development

In Chapter 2 we have discussed the basic propositions of theories on social perception and cognition and we have related these to the conceptualization of the psychological contract (cf. section 2.4.3). More specifically, the conception of the psychological contract as a mental model of the employment relationship (Rousseau, 1995) builds on the more basic theories on cognitive schemas. An important characteristic of cognitive schemas is their idiosyncratic nature and as a consequence, individual characteristics are proposed to affect schema development (Lord, 2000; Lord & Foti, 1986). More specifically, researchers in this field have focused on the impact of individual motivations and goals on (1) the perception and (2) the processing of information (Fiske, 1993). In general these insights are also relevant for understanding the role of individual motivations and goals in the psychological contract schema.

First, individual motivations and goals are proposed to affect the ***perception of information***. Depending on their particular goals, individuals will allocate more or less attention to certain information. Information that is relevant in view of the individual's goals will be more salient and therefore be more likely to be noticed and processed consciously (Fiske & Neuberg, 1990; Fiske & Taylor, 1984; Wyer & Gruenfeld, 1995). As Fiske & Neuberg (1990) state: "*the self is inextricably involved in any motivational theory because the environment carries desired or feared possibilities only when it impinges on the self*" (1993: 36-37). Catrambone & Markus (1987) describe how individual characteristics influence the perception of other persons' behaviors. They use the term *self-concept* to describe "*an individual's cognitive generalization of the self, derived from past experience, that organizes and guides the processing of self-related information contained in the individual's social*

*experiences*" (1987: 350). The authors empirically demonstrate that individuals whose self-concept includes a specific characteristic (e.g. "individualist" or "independent") are more willing to infer the presence or absence of these characteristics among target persons than individuals whose self-concept does not include these characteristics. This influence of the self-concept is greatest when the perceiver is required to go beyond the information that is given about a target person. In their conclusions, the authors argue that "*the intrusion of self-relevant material into our impressions and inferences of others appears to happen quite naturally and without effort*" (1987: 364).

Within the more applied literature on information seeking, Ashford & Cummings (1983) delineate how individuals will engage in feedback-seeking behaviors when feedback is perceived as a useful means for the realization of goals valued by the individual. They point out that "*individuals have a wide variety of goals, which they hope to achieve in a given organization. Goals such as career advancement, making friends and being liked may be just as important to an individual as correcting errors in job performance. For any of the set of goals individuals hold, they will look to the information environment for cues and information that allow an assessment of how well they are achieving that goal*" (1983: 378)[2].

Second, individual motivations and goals will affect the ***processing of information***. James & James (1989) provide a more concrete account of the impact of individuals' goals on information processing. They focus more specifically on the *values* that play a role when individuals make *evaluative meaning* of their organizational environment. They empirically demonstrated that individuals evaluate their environment in terms of the degree to which this environment is beneficial or detrimental to their personal wellbeing. They conclude that individuals' values are the standards against which they will make sense of their environment.

According to Rousseau (1995) this *selective perception and processing of information as a function of personal motivations and goals will also affect employees' perceptions of their psychological contracts*. It implies that promissory beliefs that are more relevant in attaining personal motivations and goals will be more prevalent in employees' psychological contracts than other types of promissory beliefs. Although psychological contract researchers generally agree upon the importance of individual factors (Coyle-Shapiro, 2000; Coyle-Shapiro & Kessler, 1998; 2000a; Millward & Brewerton, 2000; Rousseau, 1990; 1995; Shore & Tetrick, 1994), as to date no classification of the individual factors that are relevant to study psychological contracts has been developed. Therefore, in the subsequent section, we provide an overview of possibly relevant individual antecedents based upon our review of the psychological contract literature as well as other research areas within the organizational behavior literature.

### 3.3.2. Individual Characteristics Relevant for Studying the Antecedents of the Psychological Contract

Because newcomers enter organizations with a wide variety of personal characteristics and experiences, it is unclear *which* personal characteristics and experiences potentially influence their subsequent adaptation and attachment to the organization (Lee, Ashford, Walsh & Mowday, 1992). This also holds for individual factors affecting the psychological contract. Within the psychological contract literature these individual antecedents have not received substantial theoretical or empirical attention. As Coyle-Shapiro (2000: 16) points out: "*It is somewhat surprising that the role of the individual has not received greater attention, particularly in light of the emphasis on the individual. Individual predispositions may influence how employees view the relationship as well as how they act within that relationship*". As to date, only two conceptual models on the antecedents of the psychological contract have been developed (Shore & Tetrick, 1994; Rousseau, 1995). Although these models

[2] For a further discussion of the role of individual goals in newcomers' information-seeking behaviors we refer the interested reader to the following paper: De Vos, A., Buyens, D., & Schalk, R. (2002). Making Sense of a New Employment Relationship: Psychological Contract-Related Information Seeking and the Role of Individual Dispositions. *Under review for publication in International Journal of Selection and Assessment.*

do incorporate individual factors, they do not elaborate in detail on the relationship between these individual antecedents and the psychological contract.

In this section, we first summarize the individual characteristics discerned within both models on the antecedents of the psychological contract (section 3.3.2.1). Next, we summarize some other classifications of individual characteristics put forward within other domains of the organizational behavior literature (section 3.3.2.2). Based upon a comparison and integration of the types of individual factors considered in both sections, we subsequently propose four types of individual antecedents of the psychological contract that we will further investigate in this thesis (section 3.3.2.3).

#### *3.3.2.1. Typologies of Individual Antecedents Considered by Psychological Contract Researchers*

Both Shore & Tetrick (1994) and Rousseau (1995) have developed a model on psychological contract development, including organizational and individual antecedents. We will describe their models in more detail in Chapter 4 when we discuss the available theories on psychological contract development during organizational socialization. Here we only summarize their propositions with respect to individual antecedents.

First, Shore & Tetrick (1994) propose that individuals enter the employment relationship with goal-oriented motivations for seeking information relevant to the psychological contract. Building on empirical work of Robinson & Rousseau (1994) and Rousseau (1990), they consider two broad categories of motivations: ***Transactional goals*** consist of promotional opportunities, pay and benefits, whereas ***relational goals*** include job security, growth and development opportunities, and the interpersonal environment. The degree of emphasis on transactional and relational aspects of the psychological contract is assumed to vary due to differences in these individual goals. These employment goals will direct the individual's information-seeking activities.

Second, Rousseau (1995) considers two types of individual antecedents of the psychological contract. The first category is called ***career motives***, and corresponds with the goal-oriented motivations considered by Shore & Tetrick (1994). According to Rousseau (1995), career motives refer to those things that people try to achieve in a job. These motives will influence employees' interpretations of what they owe the organization and what the organization owes them in return. They function as a filter through which information about the psychological contract is received and through which commitments are remembered over time.
The second category consists of ***cognitive biases***, more specifically unrealistically positive views of the self, exaggerated perceptions of personal control, and unrealistic optimism. According to Rousseau (1995) these biases play a role in self-relevant cognitions like the psychological contract. Due to these biases, employees will have the tendency to believe that they have fulfilled their part of the deal and to recall making only those commitments they have been successful in or feel competent for.

Despite the general agreement among psychological contract researchers about the importance of individual antecedents, we are aware of no further theory building on the individual antecedents of the psychological contract. Apart from the two typologies just described, only a few researchers have incorporated individual antecedents in their research on the psychological contract (e.g. exchange ideology). Therefore, to provide more substantive and theory-based information on the individual antecedents of the psychological contract, we have reviewed literature on the role of individual characteristics in other areas of the organizational behavior literature.

#### *3.3.2.2. Typologies of Individual Antecedents Considered within the Organizational Behavior Literature*

In general, researchers in the area of organizational behavior acknowledge that individual characteristics affect employees' attitudes and behaviors. For instance, in the literature on newcomer socialization, Mowday, Porter & Steers (1982) have introduced the concept of ***commitment propensity*** to integrate several variables that are considered as theoretically relevant for understanding the entry process. These authors define commitment

propensity as the aggregation of (1) individual characteristics, (2) expectations about the organization, and (3) choice factors in selecting the organization (Mowday *et al.*, 1982; Lee *et al.*, 1992). The first aspect, *personal characteristics*, involves both work-related ***values and aspirations*** (e.g. desire for an organizational career and familiarity with the organization's core values) as well as ***individual dispositions*** (e.g. self-efficacy and self-confidence).

These two categories are comparable with the two groups of individual antecedents of employees' expectations, attitudes and behaviors considered by Dawis & Lofquist (1984) in their Theory of Work Adjustment, i.e. work values and personality style (cf. section 2.4.4.2). According to these authors, ***work values*** refer to what individuals attempt to attain during their careers, while ***personality style*** refers to how the employee interacts with his or her environment and how they adapt themselves to this environment. They propose that employees having the same work values can differ in their actual behaviors due to differences in their personality style.

#### *3.3.2.3. Types of Individual Antecedents Considered in our Study*

Building on these typologies, and integrating them with the individual factors put forward by Rousseau (1995) and Shore & Tetrick (1994), we consider four types of individual characteristics as antecedents of the psychological contract. These factors are theoretically embedded in one or more of the theoretical perspectives relevant for understanding the psychological contract which we have described in the previous chapter.

A. Work-related values and aspirations

- ***Work values:*** both the literature on social perception and cognition and the career literature generally acknowledge the importance of values in understanding individuals' attitudes and behaviors at work.
- ***Career strategy:*** while work values refer to what individuals seek for in their career, career strategy refers to how individual try to attain their values.

B. Dispositions

- ***Locus of control:*** this disposition is related to concepts like self-efficacy and self-confidence but it is discussed here instead of these other concepts since it can be more generally related to perceived control over one's career
- ***Exchange orientation***: this disposition is one of the few individual difference variables that have received theoretical and empirical attention in the psychological contract literature.

In accordance with Dawis & Lofquist (1984) we expect work values and career orientation to affect *what* type of promissory beliefs become prevalent in newcomers' psychological contracts (e.g. to affect the psychological contract content dimensions), while locus of control and exchange orientation will more generally affect *how* employees perceive the terms of their employment relationship (e.g. to affect the differential focus on inducements versus contributions or on certain psychological contract features).

We are aware of the fact that within both groups the individual factors we consider are not exhaustive. Other factors could also play a role in psychological contracts, for example vocational personality aspects and general personality characteristics like extraversion or conscientiousness, Type A behavior, self-esteem, and rigidity. Our choice for including work values, career strategy, locus of control and exchange orientation is based upon direct and indirect suggestions within the psychological contract literature and on the fact that there is theoretical and empirical evidence available within other areas of the literature on the role these factors play in employees' work-related perceptions, attitudes and behaviors.

In the following sections, we discuss the theoretical and empirical evidence that is available on each of these individual characteristics. We hereby depart from basic theories on the focal construct to formulate definitions of important terms and we summarize empirical research on the relationship between the construct and work-

related attitudes and behaviors. These findings will then be applied to the psychological contract. We successively discuss work values (section 3.4.3), career strategy (section 3.4.4), locus of control (section 3.4.5), and exchange orientation (section 3.4.6).

### 3.3.3. Work Values

#### *3.3.3.1. Definitions*

Since the 1950s motivational concepts such as work values, needs, and preferences have assumed an important role in both the theory and the practice of vocational and organizational psychology (MacNab & Fitzsimmons, 1987). Dawis (1991) defines values as "*cognitive representations and transformations of needs; they are enduring, although they are not traits. Manifested in interests but broader and more basic, values are standards that determine behavior*" (1991: 840). A related definition is formulated by Sverko & Vizek-Vidovic (1995): "*Values are organized sets of general beliefs, opinions, and attitudes about what is preferable, right or simply good in life*" (1995: 5). Values are assumed to form a certain organization of an individual's needs, desires and goals, hierarchically structured according to their relative importance and priorities. Because such organization helps individuals in their orientation, decision making, and integration of activities, values can be conceived of as specific *priority criteria* that direct human behavior. Operationally, values are defined as general and relatively stable *goals* an individual tries to attain. More specifically, ***work values*** refer to *the general and relatively stable goals that people try to reach through work* (Sverko & Vizek-Vidovic, 1995). Insight into work values helps researchers to understand the qualitative aspect of the meaning of work for an individual, i.e. why people work or what they seek in their jobs.

Although values are usually operationalized as relatively stable goals, they can be affected by situational as well as personal factors. For instance, changes in the labor market, social policy, and educational or promotional opportunities can influence people to redefine their goals, as can internal changes connected with maturation or psychophysical health (Sverko & Vizek-Vidovic, 1995). According to Dose (1997), values differ from attitudes in several important aspects. A value does not correspond to a particular object or situation, whereas attitudes are attached to specific objects. Values are standards, while attitudes are not. Additionally, individuals have fewer values than attitudes. Values occupy a more central position in the cognitive system and personality of individuals, they determine attitudes, and they are more closely linked to motivation. Values are more consistent than attitudes across both time and situations.

There exist numerous categorizations of work values (e.g., Dawis, 1991; Ravlin & Meglino, 1987; Roe & Ester, 1999; Super, 1990; 1995; Sverko & Super, 1995). Here we briefly describe some of the classifications of work values we have found in the literature.

Super (1957) was one of the first scholars who has tried to classify work values. His classification is quite similar to the one developed by Locke & Taylor (1990) several years later, based on their review of the work values literature. Locke & Taylor distinguished five categories:

1. Material values;
2. Achievement-related values;
3. A sense of purpose;
4. Social relationships;
5. Enhancement or maintenance of the self-concept.

Based on his theory on role development, Super (1985) subsequently developed the Value Scale. Based on this scale, an international research team has further elaborated this scale to measure the meaning of working (MOW International Research Team, 1987; Super, 1995; Sverko & Super, 1995). The MOW study is a cross-national

exploration of individuals' perceptions about working itself (as opposed to a particular job). This team conceptualized the meaning of working along a number of dimensions, i.e. work centrality, the view of work as either an entitlement or an obligation, and the cognitive centrality, dependence and criticality of valued work outcomes (MOW, 1987; Claes & RuisQuintanilla, 1994). These dimensions have also been empirically verified by the Belgian research team (Coetsier & Claes, 1990). Their empirical findings suggest a stable factor structure distinguishing five basic dimensions:

1. *Advancement* (performance, making career advancement, use of capacities, power, creativity, prestige and personal development);
2. *Autonomy* (life style and autonomy);
3. *Economic/Material Rewards* (economic security and rewards);
4. *Group Orientedness* (altruism, social interaction, social relations);
5. *Physical values* (physical capabilities and activity).

James & James (1989) empirically demonstrated that the environment is evaluated according to the extent of correspondence with four categories of work values:

1. *Challenge, independence and responsibility;*
2. *Support and recognition;*
3. *Clarity, harmony and justice;*
4. *Warm and friendly social relations.*

Elizur, Borg, Hunt & Beck (1991) and Elizur & Sagie (1999) consider a three-dimensional structure of work values:

1. *Affective values* (fair supervisor, recognition for performance, colleagues and interaction).
2. *Material values* (job security, employment conditions, rewards, extra-legal rewards, interesting work hours).
3. *Cognitive values* (responsibility in the job, use of capacities, attaining results, advancement in the job, feedback over work and job status)

Departing from classifications of general values, Ross *et al* (1999) found a related structure for work values:

1. *Social values* (contribute to people and to society, work together with people, social contacts with colleagues)
2. *Extrinsic values* (job security, a good salary, good conditions)
3. *Prestige-related values* (having the power to decide about other people, receiving recognition for one's work)
4. *Intrinsic values* (interesting and varied work, work in which you have autonomy)

The third and fourth category both correspond with the category of cognitive values distinguished by Elizur and her colleagues.

Work values are also a central element in what Schein (1978; 1993) has called "career anchors". Schein (1978; 1993) developed his career anchors model based on a 10- to 12-year longitudinal study of 44 MBA graduates. Part of the study included interviews about subjects' job histories and their reasons for making career decisions. Schein found little consistency in the job histories but a great deal of consistency in the *reasons* individuals gave for making their decisions. And these reasons became more clear-cut, articulated, and consistent as individuals in the study accumulated greater work experience. Schein developed the concept of career anchors to explain this *pattern of reasons*, which reflected patterns of *self-perceived talents, motives, and values* that guide, constrain, stabilize, and integrate individual careers. Based on his study nine career anchors were defined: (1) technical-functional competence; (2) managerial competence; (3) autonomy/independence; (4) geographical stability; (5) job security; (6) entrepreneurial creativity; (7) service-dedication to a cause; (8) pure challenge; and (9) lifestyle.

Schein (1978) has developed a theory on how these career anchors are developed throughout the life-span. He proposes that individuals begin their work lives with certain ambitions, hopes, fears, and illusions and through early work experiences they uncover initial interests, motives, values and skills. Over time and with much more life experience, they gradually realize what they need and like, what they more deeply believe or value about life

and work, what they are good at and what skills and abilities are critical to their work. These motives, values and talents gradually converge in a total career self-concept. The development of the career self-concept evolves through interactions between the individual and the organization(s) he works in (in Derr & Laurent, 1989). The population of subjects Schein has studied is a relatively high educated group (MBA graduates). Given the number of work options available to them, they were able to develop careers consistent with their needs and values.

#### *3.3.3.2. Relationship between Work Values and Work-Related Attitudes and Behaviors*

Studies on work values have shown that these values play a significant role in individuals' vocational choices and work-related attitudes and behaviors (e.g. Butler, 1983; Greenhaus, Seidel & Marinis, 1983; Judge & Bretz, 1992; Osipow, 1987; Ravlin & Meglino, 1987; Roe & Ester, 1999; Ross, Schwartz & Surkiss, 1999; Soh, 2000; Taris & Feij, 2000).

The central thesis put forward by scholars in the domain of work values is that these values lead individuals to seek for jobs that are characterized by certain attributes (Dose, 1997). Research has shown that work values influence ***attitudinal outcomes*** like motivation, work norms, job satisfaction and organizational commitment (e.g. Butler, 1983; Butler & Vodanovich, 1992; Oliver, 1990; Putti, Aryee & Liang, 1989) as well as ***behavioral outcomes*** such as job search, performance, safety behavior, absence and turnover (Judge & Bretz, 1992, Shapira & Griffith, 1990). With respect to *commitment*, Butler & Vodanovich (1992) found that employees with high scores for intrinsic work values (e.g. job involvement, pride in work) had significantly higher normative (norm-based) commitment scores than those with low scores for intrinsic work values. Employees with high scores for extrinsic work values (e.g. attitude toward social earnings and social status) had significantly higher instrumental (reward-based) commitment scores than those with low scores for extrinsic work values. Knoop (1994) investigated the relationship between five types of work values and *satisfaction* with the job and pay. His results indicate that while job satisfaction was primarily affected by intrinsic work values like achievement, use of abilities, meaningfulness of work and pride in the organization, pay satisfaction was affected by extrinsic values like status, benefits and working conditions. Finally, Judge & Bretz (1992) found that work values affected *job choice decisions*. Individuals were more likely to choose jobs whose value content was similar to their own value orientation.

Most research on the impact of work values on outcome variables addresses ***the impact of the fit between individual and organizational values*** instead of the direct impact of individual work values. In the previous chapter, we have discussed this as the central theme of person-environment (P-E) fit theories. As stated by Meyer, Irving & Allen (1998), there is little theoretical argument on which to base predictions about main effects of work values on affective, continuance, or normative *commitment*. Rather, in the person-job fit literature, *work values are generally considered to shape the way in which individuals view their experiences* (e.g. Dawis, 1992). Locke (1976) already suggested that job satisfaction is partially determined by the degree to which the work environment allows or encourages value attainment. Hence, work values are typically treated as *moderating variables*. In this respect, Mathieu & Zajac (1990) propose that certain types of individuals will become more committed to organizations that offer certain types of opportunities. Similarly, Meyer & Allen (1991) suggested that employees will differ in work values and that a particular type of work experience should influence commitment only among those employees for whom it is relevant. Meyer *et al.* (1998) empirically investigated the moderating role of work values in the relationship between work experiences and three types of commitment. Their results show that work experiences had a strong direct impact on the three commitment dimensions, while the moderating role of work values was mixed and rather contradictory. They only found a significant direct impact of the work values relating to comfort on continuance commitment, so their results provide little support for the P-E fit propositions. Other studies have also yielded mixed results on the moderating role of individuals' work values (e.g. Finegan, 2000; Meglino, Ravlin & Adkins, 1991). Most studies suggest that direct experiences and perceptions with respect to organizational values have the strongest and most consistent impact on employee

attitudes, while the interaction effect with individual values is not unequivocal. The individual's values have the smallest (and generally non-significant) impact on outcome variables.

In the area of ***job satisfaction***, studies have found positive person-by-situation interactions (e.g. Hesketh & Gardner, 1993; O'Brien & Dowling, 1980). That is, situational characteristics tend to be more strongly related to job satisfaction for employees who value those characteristics than for those who do not. Hesketh & Gardner (1993) stated that not all situational influences will be moderated by individual difference variables. Person variables might serve as moderators only for situation attributes that are of moderate normative desirability. For attributes with a high normative desirability, there will only be main effects of the situation due to the restriction of range in the person variable. This argument could also explain the equivocal results about the moderating role of work values in commitment.

#### *3.3.3.3. Work Values and the Psychological Contract*

As outlined above, values are proposed to affect individuals' vocational choices and their work-related attitudes and behaviors through their *impact on individuals' perceptions of organizational practices and of their employment relationship in general.* This makes work values also relevant for studying the psychological contract. According to James & James (1989) work values serve to create the cognitive schema through which individuals interpret their work environment. Individuals' work values determine the meaning that work, jobs, organizations, and specific events and conditions have for them.

In this respect, Ravlin & Meglino (1987) have demonstrated that *values influence the selection and interpretation of stimuli as well as actual decision-making behavior at work.* Ravlin & Meglino (1987) propose that value-schemas actively influence perception and interpretation and therefore, ambiguous stimuli will be more likely to be interpreted as indicating more dominant values. They also hypothesized that values affect decision making in that individuals will make decisions in a manner congruent with the importance they attach to different values. In correspondence with this, London (1983) states that individual characteristics associated with career motivation affect how employees perceive their work situation. This relationship will be stronger the more the situation initially is ambiguous or uncertain, a thesis which is also put forward by Ravlin & Meglino (1987). The latter is more probable at organizational entry, when individuals have only a restricted image of how their new employment relationship will be in practice.

Based on these findings work values could also *affect which promises become salient for new employees*, thereby affecting the type of promissory beliefs that will become prevalent in their psychological contracts. In accordance with this, scholars in the field of psychological contract theory propose that individuals with different work values have different preferences regarding the kind of psychological contract they want to develop with their organization. This, in turn, will lead them to have different perceptions of their employment relationship (Herriot, 1992; Herriot, Pemberton & Hawtin, 1996; Sparrow, 1996). Herriot *et al.* (1996) have provided some indirect support for this proposition. These authors found a positive relationship between employees' managerial ambitions and their expectations of a promotion in the future and a negative relationship with job security. In a related sense, Sparrow (1996) found that individuals could be clustered in seven categories depending on their perceptions regarding the type of psychological contract they believed they had with their organization (e.g. in terms of scope and duration) and that these clusters correlated with different types of career perspectives.

Recently, Van den Brande (2002) has investigated the *relationship between career anchors and the features of employees' psychological contracts*. Her study empirically supports the assumption that *what employees value in their careers is reflected in their promissory beliefs about the inducements they expect of their employer and the contributions their employer can expect of them*. Regarding *employee obligations,* the career anchors managerial competence, service and entrepreneurial creativity were positively related to employees' perceived obligations with respect to their personal investments in the organization. The anchor autonomy negatively affected this

perception. Managerial competence was also positively related to perceived employee obligations relating to flexibility and loyalty. The latter obligation was also significantly affected by the career anchor security. Van den Brande (2002) found that the impact of career anchors on these perceived employee obligations was much stronger than the impact on expected organizational inducements. Regarding these *inducements*, managerial competence only had a significant positive effect on expectations about a long-term relationship. Autonomy was negatively related to expectations about a long-term relationship, but was positively related to expectations about tangibility and clarity of arrangements. Employees with a strong security career anchor in general had higher expectations towards organizational inducements. In general, the career anchors managerial competence and autonomy were the most predictive of employees' psychological contract perceptions.
The study conducted by Van den Brande is the first study that has explicitly measured career anchors in relationship with the psychological contract and her results deserve further attention in future research. The only remark that can be made is the operationalization of psychological contract perceptions in terms of expectations, an issue we have already discussed in Chapter 2. By formulating the questions about the psychological contract in terms of expectations, there is a risk that employees answer these questions departing from their expectations towards employment relationships *in general*, without reference to their current employer. This could inflate the relationship with career anchors, also in view of the cross-sectional design in which one single questionnaire was used to measure both employees' perceptions about the dependent and independent variables. Further studies are needed in order to know if the relationships found by Van den Brande (2002) also hold when other operationalizations of the psychological contract and other research designs are used.

To sum up, more than one decade ago James & James (1989: 747) already suggested that "*future research is needed to assess if values, and perhaps other components of belief systems (e.g. self concepts, self-regulatory systems), engender the cognitive constructs used to impute meaning to work environments*". Building on their recommendation, on the general findings on work values in organizational behavior research and on the results of Van den Brande (2002), we will further investigate the role of work values in newcomers' initial psychological contract perceptions in this thesis. In this way we extend the recent empirical work on the moderating role of work values as this has been studied in the literature on person-organization fit, to the psychological contract area. While the P-E fit literature focuses on the influence of work values on the interpretation of organizational experiences, from a psychological contract perspective we will focus on *how employees' perceptions of promises about such organizational experiences are affected by their work values.*

### 3.3.4. Career Strategy

Employees can have a range of different preferences regarding the time frame and the scope of the employment relationships they want to engage in during their careers. While some prefer a traditional career within one organization, others prefer to change organizations regularly (Driver, 1994; Sparrow, 1996). Three constructs are relevant for investigating individuals' preferences for building a career within one organization or over a variety of organizations: (1) the *cosmopolitan – local latent role construct* (Gouldner, 1957), (2) the notion of *careerism* (Rousseau, 1990) and (3) *career commitment* (Blau, 1985). These are defined in the following section.

#### *3.3.4.1. Definitions*

According to Schein (1978) an individual's career orientation (operationalized in terms of career anchors) reflects both the nature of his or her *goals* as well as the *strategies* used to attain them. Goals are reflected in the importance of different work values to individuals, as we have discussed in the previous paragraph. With respect to the ***strategies*** individuals engage in to obtain these career goals, researchers propose that they can have different preferences for realizing their goals by engaging in a variety of employment relations or by developing their career within the context of one or a few organizations (Driver, 1994; Robinson & Rousseau, 1994; Sparrow, 1996). In other words, employees differ in terms of their intentions to pursue employment within a variety of organizations. This is what Rousseau (1990) and Robinson & Rousseau (1994) have called ***careerism.***

Careerism is thus defined as an individual's *preference for changing employers frequently* during their careers (Rousseau, 1990; Robinson & Rousseau, 1994). Employees taking the view that career advancement will occur outside their current organization are proposed to have expectations towards their employment relationship that are different from those focusing upon careers within a firm.
Careerism can be considered as a simplified application of the ***career concept model*** developed by Driver (Driver, 1994). Driver distinguishes between four types of individuals depending on the basic concepts they hold concerning their careers. These concepts are described as underlying a person's thinking about his or her career and they guide an individual's long-term career choices. Individuals with a *steady-state career concept* make a stable career choice early in life and stay in the same work role for life. Individuals with a *linear career concept* continue their career activity throughout their life as they move up an occupational ladder. They choose a career early in life and a plan for upward movement is developed and executed. The career choices of individuals with a *spiral career concept* evolve through a series of occupations, where each new choice builds on the past and develops new skills. Finally, individuals with a *transitory career concept* make their career choices almost continuously throughout their life and no job, field, or organization is permanently chosen. These individuals change jobs or organizations with no particular pattern. The first and fourth concepts (steady-state and transitory) can be considered as both ends of the careerism continuum. The other two are more focused on vocational choices (which are not necessarily related to choices for changing employers).

Careerism is also closely related to the notion of ***cosmopolitan versus local latent role constructs*** that has been introduced several decades ago by Gouldner (1957) and that still receives attention in the more recent literature on careers (e.g. Cornwall & Grimes, 1987; Larwood et al., 1998; Wright & Larwood, 1997). Gouldner (1957; 1958) asserts that individuals in work settings develop a generalized vision of a latent role that underlies their more formal manifest roles of manager, engineer, accountant or mere employee. Latent roles are the internalized shared expectations that are predicted to affect an individual's attitudes and behaviors. The two most widely recognized latent roles are those of local and cosmopolitan. ***Locals*** are primarily identified with and committed to the organization in which they work, while ***cosmopolitans*** are committed to maintaining the skills and values of the profession to which they belong. Thus, locals correspond with low careerists, while cosmopolitans correspond with high careerists. Locals are identified as 'company men', who commit their career aspirations to their employing company.

Within the context of research on commitment, ***career commitment*** has been found to influence the way employees perceive organizational practices such as the provision of internal training, possibilities for promotion, job security and supervisor support (Chang, 1999). Career commitment is defined as *an individual's attitude towards his or her vocation* (Blau, 1985). Individuals with a stronger degree of career commitment are assumed to show higher levels of expectations and requirements from the organization with which they start an employment relationship (Chang, 1999). Highly career-committed individuals are assumed to be more motivated when their expectations are satisfied by the organization than those who are less career-committed (Chang, 1999). But, on the other hand, a lack of fulfillment of expectations by the organization will have a stronger negative impact on attitudes and behaviors for those employees who are strongly committed to their careers than for other employees. The cosmopolitan latent role, described by Gouldner (1957; 1958), corresponds with the notion of highly career-committed individuals. Individuals with a more cosmopolitan career orientation generally have a stronger degree of commitment to their career and therefore will be more likely to have greater expectations towards their organization. Career commitment has gained growing importance since a career provides a significant source of occupational meaning and continuity when organizations have become unable to provide employment security (Chang, 1999).

#### *3.3.4.2. Relationship between Career Strategy and Work-Related Attitudes and Behaviors*

***Career commitment.*** Empirical research has provided evidence for a relationship between career commitment and *affective commitment* (Chang, 1999). More specifically, career commitment has been found to moderate the

effect of perceived supervisor support on affective commitment and to have a significant impact on *intent to turnover*, both as an independent variable and as a moderator. The latter corresponds with previous findings that employees with high career commitment consider leaving the organization when career growth opportunities in the organization are low (Bedian *et al.*, 1991). Together these findings suggest that employees with a different degree of career commitment have a different perception of and react differently to organizational practices. Cherniss (1991) found a negative correlation between career commitment and *career change* (the latter defined as the number of times employees had changed from one occupation to another during their career). She also found that age was strongly correlated with career commitment, with older subjects being more committed to their careers than younger ones. Other studies have shown that individuals who are highly committed to their careers spend more time in *developing skills*, and show *less intention to withdraw* from their careers and jobs (Aryee & Tan, 1992; Blau, 1985).

According to Chang (1999), individuals highly committed to their careers may bring greater levels of career expectations or desires into the organization. When their career expectations or desires are fulfilled by the organization, they would be more motivated than those with low levels of career commitment. This means that an individual's commitment to an organization results not only from identification with that organization but also from identification with a specific career the individual is pursuing within the organization. That is, the effect of the perception of career-oriented practices on organizational commitment will be greater for those highly committed to their careers since they are more concerned with pursuing their current career and with satisfying their career needs than those who demonstrate a low level of career commitment.

***Cosmopolitans versus locals.*** According to Gouldner (1957), locals, or "company men" are employees who are identified as "loyal" and they are more likely to use an inner reference group orientation. These individuals are more likely to be *committed to their organizations* and to be more involved in their organization, and as a consequence they are also *less likely to think about leaving* the organization (Blau 1985). Cosmopolitans are less likely to be identified in this way because they have a more basic commitment to their career instead of the organization for which they work. Since they are low on loyalty to the organization, they are more likely to use an outer reference group orientation.

#### *3.3.4.3. Career Strategy and the Psychological Contract*

As Chang (1999: 1258) states: "*The discussion on psychological contracts might be enriched by considering individual attitudes towards careers. Individuals enter a company with their own career plans and would be attracted to the current company if the company's practices satisfy their career needs.*" The attitudes of employees towards their career may affect their attitudes towards their organization because employees are pursuing their career in their current organization, but this current organization does not have to be the only one that they will be working for in the future. Therefore, the strength of an individual's career commitment could affect the saliency of career-related expectations as part of their psychological contract.

A few studies have investigated the relationship between career strategy and the psychological contract (Larwood, Wright, Desrochers & Dahir, 1998; Robinson & Rousseau, 1994; Rousseau, 1990).

Rousseau (1995) has related the ***cosmopolitan-latent role construct*** to the psychological contract. According to Rousseau (1995), cosmopolitans are more concerned with the conditions of their employment relationship. They can put together a reasonably definitive psychological contract, including an advanced understanding of the nature of work and the standards to be applied to it as well as the pay they expect and the professional system that should support their activities. In contrast, those who join the organization as locals present themselves as more flexibly available for work, their expectations regarding the organization are more general and more open for interpretation and change during the course of the employment relationship. This means that their psychological contracts are less definitive (Rousseau, 1995).

Larwood *et al.* (1998) have empirically investigated differences between these two groups in relationship with perceived psychological contract violation. They investigated the proposition that cosmopolitans have a lower

level of tolerance for violations of contractual expectations than that exhibited by locals because cosmopolitans are likely to be more aware of the manner in which they should be treated. Furthermore, locals' connections within the organization may better allow them to correct perceived violations, perhaps through political processes. Larwood *et al.* (1998) found that the perception of psychological contract fulfillment was correlated with latent role status and that there was a negative correlation between the cosmopolitan and local scale. Cosmopolitans were less likely to agree that their psychological contract was being fulfilled, while locals were more likely to perceive fulfillment. The difference between the two correlations was significant, indicating that cosmopolitans and locals view their situations within the organization in a different way.

Rousseau (1990) investigated the perceptions of graduate MBA-students regarding their psychological contract in relationship with ***careerism***. She proposed that employees who view their employment with a particular organization as a stepping stone to better jobs elsewhere are adopting a more transactional view regarding their employment. In contrast, those who actively seek out a job with a specific organization should value having a relationship with that employer. The results of her study empirically confirm that *careerism is positively correlated with the preference for a transactional contract, and negatively related to the preference for a relational psychological contract*. The beliefs of individuals scoring high on the careerism scale (meaning that they expect to change employers frequently) contained more transactional employer and employee obligations, and fewer relational obligations. Based on this finding, Rousseau (1990) concludes that individuals who approach their careers in an instrumental fashion are less likely to engage in a relational agreement with their employer and will be more likely to view their employment relationship in a transactional way. Building on these findings, Robinson & Rousseau (1994) investigated the *moderating impact of careerism on the effects of psychological contract violations*. They proposed that employees who place greater emphasis on the employment relationship itself would be more negatively influenced by violation. Individuals who adopt a more transactional relationship with their employer do not intend this relationship to be long term and therefore they would experience less loss from psychological contract violation. Robinson & Rousseau (1994) empirically found a negative impact of careerism on the relationship between perceived psychological contract breach and subsequent trust in the organization. For employees with a relational view on the employment relationship (low careerists) psychological contract violation had a significantly stronger negative effect on trust than for high careerists. However, careerism had no moderating impact on the relationship between psychological contract breach and other outcome variables (i.e. satisfaction, intention to stay, and actual turnover). For these outcomes, the experience of violation had the same strong negative impact on both employees having a long-term and short-term view on their current employment relationship.

### 3.3.5. Locus of Control

Over the past years, there has been an increasing interest in the dispositional antecedents of employee attitudes and behaviors (Judge & Larsen, 2001). Despite this interest, the research on these dispositions is very fragmented and there is no formal agreement on which dispositions are most relevant for explaining employee attitudes and behaviors in the workplace (Judge & Bono, 2001; Judge & Larsen, 2001). Based on their review of the literature, Judge and his colleagues have introduced the concept of ***core evaluations of the self***, which integrates four dispositional characteristics: ***self-esteem, generalized self-efficacy, locus of control, and emotional stability*** (Judge, Locke & Durham, 1997; Judge, Bono & Locke, 2000; Judge & Bono, 2001; Judge & Larsen, 2001). According to Judge *et al.* (1997), these four dispositions indicate one higher order factor that forms the basis for other, more specific evaluations that individuals make about themselves and their self-worth. These evaluations, in turn, are proposed to influence employee job satisfaction, motivation and job performance (Judge & Bono, 2001). As an example, Judge, Locke, Durham & Kluger (1998) found that individuals with positive core self-evaluations were more likely to be satisfied with their job than individuals with less positive core self-evaluations. The former group also rated their work as higher on core job dimensions (identity, variety,

feedback, autonomy, and task significance) and this perception mediated the relationship between core self-evaluations and job satisfaction.

It is beyond the scope of this thesis to elaborate in detail on each of the four core evaluations distinguished by Judge and his colleagues. Since the information on the relationship between core evaluations and the psychological contract is almost non-existent, we have decided to focus on one of these, as a first step for advancing our understandings of the impact of individual dispositions on the psychological contract. In a prior study conducted within our research group, we examined locus of control and emotional stability as two individual antecedents of the psychological contract (Buyens *et al.*, 2002). The evidence for the impact of locus of control was stronger and more unequivocal than the evidence for emotional stability. Of the four constructs representing core self-evaluations, locus of control is also the construct that has been investigated most frequently in relationship with employee attitudes and behaviors (Judge & Bono, 2001). *Therefore we decided to focus on the **locus of control** construct in this thesis.* We believe that locus of control is a relevant construct for studying differences in psychological contracts since it reflects the belief of control over the outcomes of a situation or an event. In this sense, both organizational inducements and employee contributions are types of outcomes about which newcomers can have a stronger or weaker feeling of control and this could be reflected in their promissory beliefs about these inducements and contributions.

#### *3.3.5.1. Definitions*

The locus of control (LOC) construct has originally been introduced by Rotter (1966), who defined it as *the belief that a response will, or will not, influence the attainment of a reinforcement.* LOC is a stable personality trait that refers to the extent to which people attribute the source of control over events to themselves or to the external circumstances (Lefcourt, 1982; Levenson, 1981; Spector, 1982). It is a 'problem-solving' generalized expectancy, addressing the issue of whether behaviors are perceived as instrumental to goal attainment, regardless of the specific nature of the goal or reinforcer (Furnham & Steele, 1993).
Persons with a higher internal LOC (so-called 'internals') believe that the attainment of a reinforcement is determined largely by personal effort, ability, and initiative, whereas persons with a higher external LOC (so-called 'externals') believe that reinforcements are determined largely by other people, social structures, luck, or fate (O'Brien, 1984). Thus, *locus of control describes the degree to which individuals believe they have personal responsibility for what happens to them* (Kren, 1992). Locus of control is related to outcomes like subjective well-being, somatic health, life satisfaction and affect (Klonowicz, 2001; Spector *et al.*, 2001). Based on their meta-analysis, Judge & Bono (2001) recently concluded that locus of control is one of the most widely studied personality traits in personality and applied psychology. LOC is related to but conceptually different from self-efficacy in that LOC is more concerned with being able to control *outcomes*, while self-efficacy relates to confidence about *behaviors*.

More recent conceptualizations of locus of control suggest that control beliefs may vary across situations (Furnham & Steele, 1993; Hahn, 2000). Thus, beliefs about control at work may differ from beliefs about control in other life areas. In line with this, a number of domain-specific scales have been developed in order to investigate generalized control beliefs in contexts as varied as health, politics, economics, and work settings (Hodgkinson, 1992). Researchers in the area of work and organizational psychology have attempted to improve the predictive power of LOC measures by making them specific to the work context. ***Work LOC*** is defined *as an individual's general belief in personal control in organizational settings* (Spector, 1982). It deals with issues like promotions, getting a job, dealing with ones supervisor and job effort within the work context (Furnham & Steele, 1993; Spector, 1982; 1988).

#### *3.3.5.2. Relationship between Locus of Control and Work-Related Attitudes and Behaviors*

Researchers employing LOC suggest that the construct is an important and useful dispositional variable for explaining attitudes and behaviors in work settings (Judge & Bono, 2001; Levenson, 1981; O'Brien, 1984;

Spector, 1982). Several objects ("loci") of control have been studied in this respect, e.g. promotions, salary increases and career progress. Here we highlight some empirical findings and theoretical explanations for the role of locus of control in the work context, which could be relevant for understanding the relationship between work locus of control and the psychological contract.

Based on a recent meta-analysis of the relationship between internal LOC and *job satisfaction*, Judge & Bono (2001) conclude that the estimated true score correlation between internal LOC and job satisfaction is .32. A number of studies also found significant relations between LOC and *organizational commitment* (e.g. Furnham *et al.*, 1994; Kinicki & Vecchio, 1994; Luthans *et al.*, 1987). Together these findings suggest that internals are more likely to be satisfied with their jobs and more committed to the organization than externals.
Several reasons have been offered to explain these relationships. First, individuals with an internal LOC are proposed to be more satisfied because they are less likely to stay in a dissatisfying job. Therefore, there will be fewer dissatisfied internals than externals (Spector, 1982). The same holds for commitment. Since internals are more likely to take action when dissatisfied with a situation (particularly by leaving the organization), only committed internals are expected to stay with their organization (Luthans *et al.*, 1987). Internals are likely to perceive more alternatives than externals, and because choice is related to commitment, internals feel more committed to the organization that they decided to join. This assumption received empirical evidence in a study conducted by Coleman, Irving & Cooper (1999), who found that while internal LOC was associated with affective commitment, external LOC was associated with continuance commitment. The latter type of commitment is facilitated by factors that increase the cost of leaving the organization. Since externals tend to perceive fewer alternatives outside the organization and thus feel "stuck" with their organization, this is proposed to increase their continuance commitment
Second, based on cognitive consistency theory, Spector (1982) argues that individuals who believe to have personal control to leave the situation but who choose to stay will reevaluate the situation favorably to retain consistency between their attitudes and behavior, thereby showing higher levels of satisfaction and commitment.
Third, internals may perform better and receive rewards for that performance (both financial and in terms of promotions), which should make them more satisfied (Spector, 1982).

Empirical work has also demonstrated that internal LOC is negatively related with *intention to turnover* (Hoff Macan *et al.*, 1996; Spector, 1982; 1988) as well as with *actual turnover* (Spector, 1988). According to Spector (1982) the relation between LOC and turnover is complex and a consistent correlation between both is not expected. On the one hand, internals tend to take action and thus might be expected to quit jobs more readily. On the other hand, they tend to be more successful on the job and more satisfied, factors associated with less voluntary turnover.

There is also evidence for a relationship between locus of control and *motivation.* According to Spector (1982) internals should be easier to motivate and they should be more responsive than externals if the appropriate performance-reward contingencies can be presented. According to Rotter (1966), locus of control is an aspect of personality that governs a person's perception of the relation between effort, performance, and reward. A person with a more internal LOC will be more motivated than a person with a more external LOC, because internals believe they are "in control", i.e. able to produce desired outcomes. Both Goldsmith *et al.* (2000) and Skinner (1996) have reviewed studies that have empirically demonstrated this relationship. For instance, employees with a high level of internal LOC are more responsive to challenges, develop more effective action plans and exert more sustained effort even when faced with obstacles.

The results of the quantitative meta-analysis conducted by Judge & Bono (2001), indicate that there is an estimated true correlation between internal LOC and *job performance* of .22. Empirical work suggests that the relationship between LOC and performance further depends on the type of performance dimension. For example, Blau (1993) found that internal LOC was positively related to the initiative dimension of performance, which means that employees with an internal LOC over their work engaged more frequently in innovative and

spontaneous performance that goes beyond basic job requirements. External LOC was related to the compliant dimension of performance, i.e. behavior that complies with given role requirements.
The relationship between internal LOC and performance is explained by the stronger motivation of employees with an internal LOC. Since internals place a higher value to goal attainment and since they feel more in control to attain these goals, a stronger motivational response to performance incentives can be expected from them (Hollenbeck, & Brief, 1987; Kren, 1992; Spector, 1982). The differential impact of LOC on different performance dimensions is explained by the fact that internals look at themselves for direction, while externals depend on outside factors such as their supervisor or company rules (Spector, 1982). Therefore, internals are more likely to take initiative and show independence in their actions, while externals are more compliant with specified performance norms (Kren, 1992).

Several years ago, Phares (1968) already stated that internals exert greater efforts to control their environment, exhibit better learning, seek new information more actively, use information better, and are more concerned with information than externals are. In this respect, Lefcourt & Wine (1969) empirically demonstrated that individuals with an internal LOC are more likely to engage in *information seeking* and that they use the acquired information to a greater extent in decision making than externals. In a related sense, Renn & Fedor (2001) recently demonstrated that personal control perceptions affect employees' feedback-seeking behaviors. These authors did not explicitly use the LOC construct but instead they defined personal control perceptions as beliefs about one's ability to change the environment in a desired direction, which comes very close to LOC. Their study shows that individuals who believed to have control over their environment, engaged more actively in feedback-seeking behaviors than individuals who experienced no personal control.
Lefcourt (1982) explains the relation between LOC and cognitive activity by referring to the differential need of internals and externals to regulate their experiences. Since internals are more concerned with self-direction, they pay more attention to information that is relevant for attaining their goals and they may recognize the relevance of information for goal attainment more quickly than do externals. They will also process this information more actively. Otherwise, the probability of internals being able to regulate their experiences would be lessened. Externals, on the other hand, more readily accept dependency on more competent others and thus have less need for information.

#### *3.3.5.3. Locus of Control and the Psychological Contract*

Based on their meta-analysis, Judge & Bono (2001) conclude that *personality characteristics not only affect employees' behaviors at work but also their perceptions of the work context.* In this respect, they consider locus of control as one of the most relevant personality constructs to study individual differences in the workplace (Judge & Bono, 2001).

Although we have found no studies that have empirically investigated the relationship between locus of control and the psychological contract, two studies have investigated the relationship between locus of control and ***perceptions of the employment relationship***. Beehr, Taber & Walsh (1980) examined employees' perceptions of means for obtaining a better job within the organization, i.e. *perceived internal mobility channels*. They found that employees who perceived promotions to be based on internal or ability criteria showed higher levels of involvement, effort towards quality and quantity, intrinsic motivation, job satisfaction and career satisfaction than employees who believed that promotions were due to external or non-ability criteria. In a related sense, Lam & Schaubroeck (2000) found that *internal LOC mediates the relationship between promotion and general attitudes over time.* After having received a promotion, employees scoring high on internal LOC showed a significant increase in organizational commitment, job involvement, job satisfaction and a significant decrease in intentions to quit both three months and 18 months after promotion. For employees with an external LOC these relationships were also significant after 3 months, but they disappeared after 18 months. Thus, promotion had only long-term effects on attitude improvements for employees with an internal LOC. According to Lam & Schaubroeck (2000), employees with an external LOC experienced positive emotions after attaining rewards, but

these pleasures were only of short duration because these employees believed that it was not their own behavior that caused the positive outcomes. Instead, they believed these rewards to be mainly due to chance or other external forces. Together these results support the proposition that *individuals who perceive their experiences within the organization as being based on their own capacities and under their personal control have more positive work-related attitudes.*

Although Beehr *et al.* (1980) categorized employees' perceptions of mobility channels along the external-internal locus of control dimensions, they have not explicitly tested the relationship between LOC and the perception of mobility channels. Relating their results to the psychological contract literature, *we could expect that depending on their locus of control, employees differ in their perception of what their organization has promised them.* People who attribute what happens to them within the organization to luck or fate might have lower perceptions with regard to organizational promises. On the other hand, since they have a lower perception of the extent to which outcomes depend on their own actions and behaviors, they might also be less inclined to make many promises to their organization. The latter corresponds with Rousseau's (2001b) thesis that people are more inclined to make promises when they feel a sense of control over the situation.

O'Brien (1984) argues that personality variables, such as LOC, are likely to have greater explanatory power *in situations where an individual has a fair amount of discretion or freedom of movement.* This could be more strongly the case at organizational entry, which is the focus of our research questions on the psychological contract. According to Lefcourt (1982), the advantage that internals have over externals in information seeking and utilization is only an advantage in situations involving complex information, so simple situations may yield no internal-external differences. Again, we could say that the uncertainty newcomers face at organizational entry is a rather complex situation and that this could lead newcomers to pay more attention to obtaining information about their psychological contract.

Renn & Fedor (2001) refer to existing research demonstrating that individuals who believe that they exert influence over the work environment *search more actively for information* about work methods and procedures, and about decisions involving pay and promotions at organizational entry (Ashford & Black, 1996; Bell & Staw, 1986). This corresponds with Lefcourt's (1982) conclusion that internals are more perceptive to their environment and that they are more efficient processors of information than are externals. Relating this to Rousseau's (1995) conceptualization of psychological contract schemata, it can be expected that this also holds for information relating to the psychological contract[3].

### 3.3.6. Exchange Orientation

In the previous chapter we have outlined how social exchange theories form a relevant perspective for understanding the psychological contract construct (cf. section 2.4.2). In correspondence with the basic propositions inherent in theories on social exchange, the psychological contract is conceived as employees' exchange-based beliefs and perceptions regarding their employment relationship (Blader & Tyler, 2000).
The *norm of reciprocity* (Gouldner, 1960) is a basic assumption in social exchange theories. According to the reciprocity norm, fulfillment of obligations by one party is conditional on the fulfillment of obligations by the other party (Blau, 1964; Gouldner, 1960; Homans, 1961). However, research has demonstrated that individuals differ in the extent to which the norm of reciprocity is central in their perceptions towards exchange relationships (Blader & Tyler, 2000). As Blader & Tyler (2000) note, employees may engage in behaviors that benefit the organization, although the detection of or the reward for these contributions is very unlikely. The fact that

[3] For a further discussion of the role of locus of control in newcomers' information-seeking behaviors about the psychological contract, we refer the interested reader to the following paper: De Vos, A., Buyens, D., & Schalk, R. (2002). Making Sense of a New Employment Relationship: Psychological Contract-Related Information Seeking and the Role of Individual Dispositions. *Under review for publication in International Journal of Selection and Assessment.*

employees engage in such behaviors in the absence of rewards, indicates that the exchange motive does not hold universally for all individuals. To capture the individual differences in exchange-oriented behavior, two constructs have been introduced in the literature: *exchange ideology* and *equity sensitivity*.

### *3.3.6.1. Definitions*

The notion of ***exchange ideology*** has been introduced by Eisenberger and his colleagues and is defined as a dispositional orientation involving the relationship between what the individual receives from the organization and what he/she will, in return, give to the organization (Eisenberger, Huntington, Hutchinson, & Sowa, 1986). Individuals who have a strong exchange ideology will perform congruent with organizational reinforcements, while individuals with a low exchange ideology will put forth effort without regard to what they receive from the organization (Witt, 1991a; 1992). The latter will work hard even if they perceive themselves as being treated poorly or unfairly by the organization. Thus, exchange ideology reflects the *individual's normative expectations regarding the degree of balance inherent to the person-organization exchange relationship* (Witt, 1991a). Although social exchange theories emphasize that reciprocity in exchange is a general social norm (see Gouldner, 1960), individuals will differ in the importance they attribute to this norm. In other words, exchange ideology moderates the relationship between the balance in the exchange of contributions and inducements and outcome variables as this relationship is described by social exchange theories.

A second construct that is used to describe individual differences in exchange orientation is ***equity sensitivity*** (Huseman, Hatfield & Miles, 1987). This construct is derived from equity theory, developed by Adams (1965). Equity sensitivity addresses *an individual's desired relationship with their organization* (King & Miles, 1994). It describes how individuals react in consistent but individually different ways to perceived equity or inequity because they have different preferences for (i.e. are differentially sensitive to) equity (Huseman *et al.*, 1987). The equity sensitivity continuum is divided into three types of equity-sensitive individuals (Huseman *et al.*, 1987): benevolents, entitleds and equity sensitives. Although Huseman *et al.* (1987) originally stated that these three groups differ in the *preferred amount* of outcomes, more recent research suggests that equity sensitivity is more predictive of individuals' *tolerance for inequity* and of the *importance of types of outcomes* (King *et al.*, 1993; Miles *et al.*, 1987). More specifically, these more recent studies indicate the following differences:

1. *Benevolents*: Benevolents have more tolerance for under-reward (King *et al.*, 1993) and they prefer intrinsic types of outcomes like a feeling of accomplishment over and above extrinsic tangible types of outcomes like pay (Miles *et al.*, 1987). They are considered as 'givers' who are relatively untroubled by unfair treatment and may be content with little return for their inputs (Mudrack, Mason & Stepanski, 1999; O'Neill & Mone, 1998).
2. *Entitleds*: Entitleds' contentment derives from perceptions that they are "getting a better deal" than those around them, and they are not satisfied unless this is the case (O'Neill & Mone, 1998). They are considered as "takers" or "getters" and have a preference for over-reward (O'Neil & Mone, 1998). The study conducted by Miles *et al.* (1994) indicates that this preference for over-reward involves a strong preference for extrinsic, tangible types of outcomes rather than more intrinsic types of outcomes.
3. *Equity sensitives* are situated in between these two extremes and they are thought to be those described by traditional equity theory assumptions, seeking to balance their outcome-input ratio with those of others so as to avoid both under-reward and over-reward situations (O'Neill & Mone, 1998). The study conducted by Miles *et al.* (1994) demonstrates that the extent to which equity sensitive employees prefer both intrinsic and tangible extrinsic rewards was situated in between the rankings of entitleds and benevolents.

Research has demonstrated that equity sensitivity and exchange orientation are distinct constructs and that they are negatively correlated (King & Miles, 1994; King *et al.*, 1993). More specifically, benevolents tend to score significantly lower on exchange ideology than equity sensitives and entitleds do.

Related to both constructs is the notion of ***relationship orientation*** (Clark & Mills, 1979). Relationship orientation provides a framework for understanding the norms that influence employees to act in the interest of their work organizations. According to Clark & Mills (1979), there are two sets of norms that characterize the way in which benefits are given by both parties in a relationship: communal and exchange norms. *Exchange norms* are identical to those used in social exchange theories and emphasize the balance and reciprocity in giving and receiving benefits. *Communal norms* are defined by a primary concern with the welfare of the other half of the relationship and they emphasize directing efforts towards meeting the needs of the other party to the relationship, without regard to benefits received (Blader & Tyler, 2000). Reciprocity plays little role in communal norms. In this sense, communal norms are related to what Huseman and his colleagues have called "benevolent" employees (Huseman *et al.*, 1987).

#### *3.3.6.2. Relationship between Exchange Orientation and Work-Related Attitudes and Behaviors*

The thesis that ***exchange orientation*** *moderates the relationship between the inducements individuals receive from the organization and outcome variables* has been confirmed in empirical studies conducted by Eisenberger *et al.* (1986; 2001), and by Witt (1991a; 1991b; 1992; Witt & Wilson, 1990). These studies show that the relationships between perceived employer inducements and outcome variables like *job satisfaction, commitment, absenteeism* and *organizational citizenship behavior* are greater for subjects with a strong exchange ideology than for those with a weak ideology. For instance, Eisenberger *et al.* (1986) found that the relationship between perceived organizational support and absenteeism was stronger for employees with a strong exchange ideology than those with a weak exchange ideology. In a more recent study, these authors found that the relationship between perceived organizational support and felt obligations to care about the organization by the employee was stronger for those employees having a stronger exchange ideology (Eisenberger *et al.*, 2001). Similarly, Witt & Wilson (1990) found that there was a stronger relationship between sufficiency of monthly income and both job satisfaction and organizational commitment among employees scoring high on exchange ideology than among those scoring low on exchange ideology. Witt's (1991) study showed that perceptions of equal opportunities were more strongly related to job satisfaction among military trainers scoring high on exchange ideology. Together, these findings indicate that organizational inducements have a stronger impact on employees' attitudes and behaviors for those employees whose attitudes and behaviors are more dependent on organizational reinforcement (i.e. who place more value to the norm of reciprocity in their employment relationship).

***Equity sensitivity*** has been investigated as a *moderator* of the relationship between perceptions of equity and organizational outcomes like *performance, job satisfaction, commitment, and turnover propensity* (e.g. Bing & Burroughs, 2001; Huseman *et al.*, 1985; 1987; King & Miles, 1994; King *et al.*, 1993; Miles, Hatfield & Huseman, 1989; O'Neill & Mone, 1998). These studies demonstrate that equity sensitivity predicts the different reactions experienced by people in similar inequity situations. Specifically, benevolent individuals have been found to be more satisfied than entitled and equity-sensitive individuals in situations of under-reward (King & Miles, 1994). Equity sensitivity also has *direct effects* on outcome variables. In general, benevolents tend to be more satisfied, to be more committed to their organization, and to have stronger intentions to remain with their current organization (King & Miles, 1994; King *et al.*, 1993; O'Neill & Mone, 1998). King *et al.* (1993) found that employees higher in benevolence place more importance on work processes and intangible types of outcomes (e.g. friendships) than those at the entitled end of the continuum, who place more importance on tangible outcomes such as pay. Equity sensitivity also affects employee *performance* and *organizational citizenship behavior*. For example, Bing & Burroughs (2001) demonstrated that individuals on the belevolent end of the equity sensitivity continuum obtained higher ratings of overall job performance from their supervisor. Benevolent individuals are also more willing to do more work for less pay than entitled individuals (Miles *et al.*, 1989, 1994). In accordance with this, Blakely *et al.* (2001) found that benevolents performed more organizational citizenship behaviors than entitleds, regardless of the degree of perceived organizational justice,

while the organizational citizenship behaviors of entitleds were more contingent upon perceived organizational justice.

#### *3.3.6.2. Exchange Orientation and the Psychological Contract*

As indicated in the previous section, research indicates that both exchange ideology and equity sensitivity are predictive of employees' attitudes and behaviors in the employment relationship. Both constructs have direct effects on outcomes and they moderate the relationship between organizational experiences and outcomes. More recently, Coyle-Shapiro & Kessler (1998; 2000a) have examined the role of ***exchange ideology*** in relationship with the psychological contract. The results of their studies show that *in general, exchange ideology has a negative effect on employees' perceptions of their obligations to the organization and on their actual contract behavior*. More specifically, individuals scoring high on exchange ideology were more likely to hold weaker obligations to the organization and were less likely to fulfill their obligations (Coyle-Shapiro & Kessler, 1998). Besides this, exchange ideology also *moderated the relationship of employees' perceptions of employer inducements received with their subsequent perceptions of obligations towards the organization and with their perceptions of fulfillment of these obligations*. For employees with a high level of exchange ideology, the relationship between employer inducements and perceived obligations was stronger when inducements were high, while this relationship was not affected by the strength of inducements for employees with a low level of exchange ideology. This was not only true for employees' perceptions of the obligations they owed their employer, but also for their actual contract fulfillment (i.e. their report on how well they fulfilled their obligations).

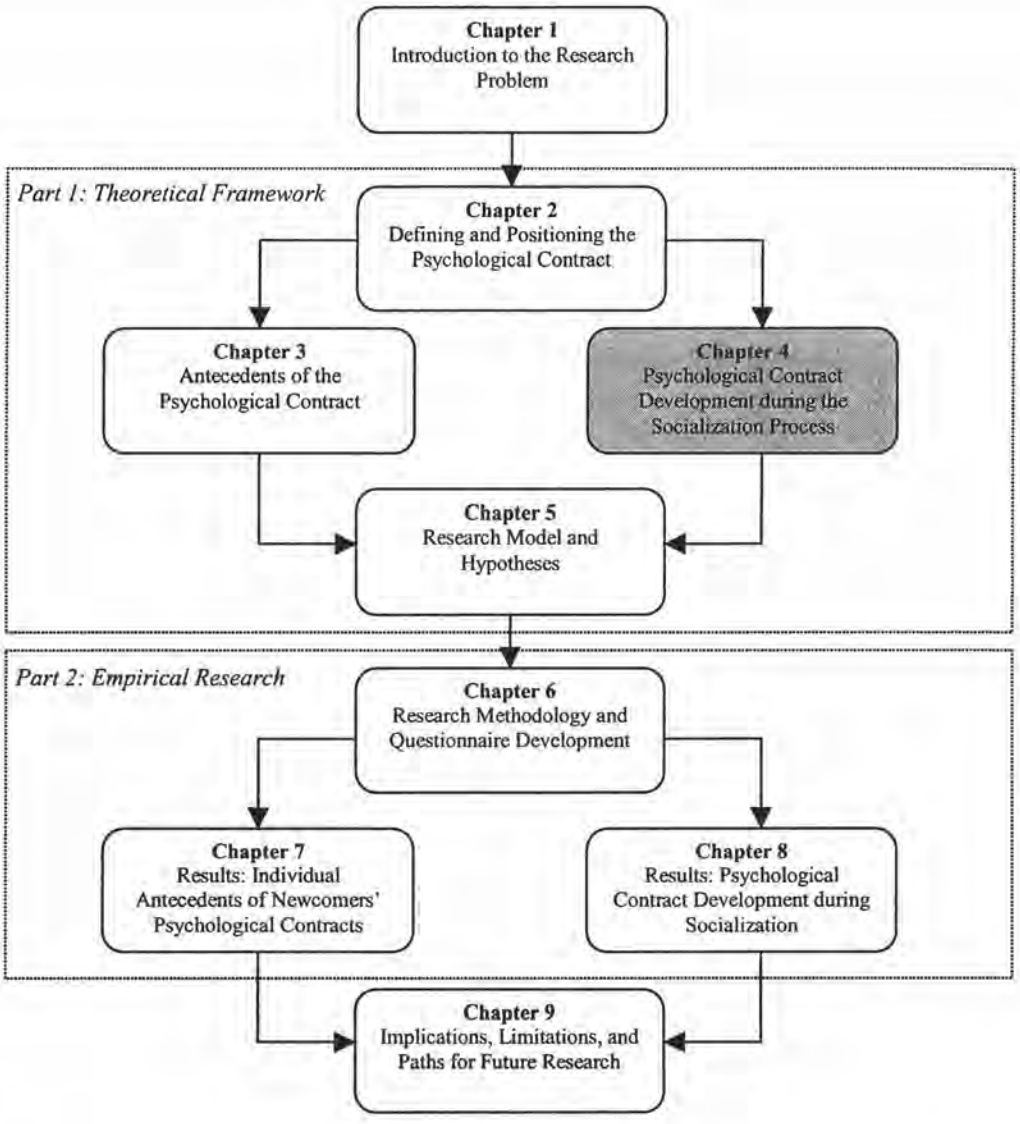
In these studies, the direct relationship between exchange ideology and psychological contract perceptions was only assessed with respect to employee obligations. However, if employees with a high level of exchange ideology more strongly base their own promises and their actual contributions on what they receive from the organization, this could also imply that they are more focused on what they receive from the organization than employees with a low level of exchange ideology. This could thus mean that exchange ideology positively affects perceptions about employer inducements. Further research is needed to clarify this relationship.

## 3.4. SUMMARY AND CONCLUSIONS

It was the objective of this chapter to provide an overview of theories and empirical evidence concerning the antecedents of the psychological contract. After a discussion of antecedents situated at the societal and organizational level, we have elaborated in more detail on the role of individual antecedents in explaining interindividual differences in newcomers' psychological contracts. From this review it has become clear that there is a shortage of empirical studies in which the role of antecedents has been assessed. This holds not only for antecedents at the societal and the organizational level, but also for individual-level antecedents. Only a few psychological contract researchers have developed theoretical models including individual antecedents of the psychological contract but as to date their propositions have not been empirically tested. At the empirical level, most studies that have included individual antecedents did not depart from substantive theoretical insights. For this reason our review of individual antecedents was based to a large extent on theories and empirical findings coming from related, more longstanding research traditions. Based on a summary of typologies of individual factors relevant for explaining interindividual differences in employee attitudes and behaviors, we have selected four types of individual antecedents that we will further assess in this thesis as individual antecedents of newcomers' psychological contracts: work values, career strategy, locus of control and exchange orientation. For each of these constructs we have reviewed the relevant literature and we have discussed them from a psychological contract perspective. Based on the insights obtained from this review, in Chapter 5 we will formulate our hypotheses on the relationship between these individual antecedents and newcomers' psychological contracts. In the next chapter we will first further discuss the issue of newcomer psychological contract development during the socialization process.

CHAPTER STRUCTURE

# Chapter 4
# Psychological Contract Development during the Socialization Process




*In this chapter we discuss the development of newcomers' psychological contracts during the socialization process. Although the importance of studying psychological contract development is generally recognized by psychological contract researchers (e.g. Millward & Brewerton, 2000; Rousseau, 1995; Shore & Tetrick, 1994), this area of research has remained underdeveloped, both at the theoretical and the empirical level. To create a relevant theoretical framework we therefore depart from the literature on newcomer socialization. By reviewing theories and empirical research on newcomer socialization, our aim is to improve our knowledge about how psychological contract development takes place during the socialization process.*

*We first give a brief overview of the basic propositions of socialization theories (section 4.1). Next, we discuss the role of newcomer information seeking during the socialization process (section 4.2). In section 4.3 we review theories and empirical evidence on psychological contract development. In section 4.4 we integrate the major propositions of socialization and psychological contract theories in order to enhance our theoretical understanding of the processes of psychological contract development during the socialization process.*

## 4.1. BASIC PROPOSITIONS OF THEORIES ON NEWCOMER SOCIALIZATION

Socialization is defined as "*the process by which a new employee is integrated into an organization through the acquisition of knowledge needed to perform the job function, and through assimilation of the organization's culture and climate to the extent that he/she fits with the organization's established work practices and norms*" (Anderson & Ostroff, 1997: 414). Socialization activities focus on facilitating the integration of employees through fit to jobs and fit to the organization (Van Maanen & Schein, 1979). In this respect socialization research makes a concrete account of theories on person-environment fit (see chapter 2) by applying it to the initial stages of the employment relationship.

In this section we discuss the basic propositions of traditional socialization theories. We first describe the content dimensions of socialization (section 4.1.1) and the stages discerned within the socialization process (section 4.1.2). This is followed by a description of the role of organizational factors in socialization (section 4.1.3). Finally we discuss the central outcome of socialization, i.e. newcomer adjustment (section 4.1.4).

### 4.1.1. Content of Socialization

The content of socialization refers to what is actually learned during socialization (Fisher, 1986). Louis (1980) considers two basic types of content: (1) *role-related learning*, and (2) *general learning about the organizational culture*. Regarding the first, socialization aims at identifying the newcomer's role-relevant abilities, conveying and negotiating expectations, and clarifying incentives and sanctions. The second is focused on becoming acquainted with the culture of the organization: the norms and assumptions collectively shared, which govern membership, values, activities, and aims of the organization.

Other researchers have suggested different typologies of socialization content, thereby discerning content dimensions that each represent different types of learning outcomes (Feldman, 1981; Fisher, 1986; Schein, 1968; 1971). These typologies are mostly theoretical categorizations. There is a great deal of conceptual overlap between them, but almost no empirical research exists which has empirically verified the content of socialization (Chao *et al.*, 1994). Based on their review of existing typologies, Chao *et al.* (1994) make a distinction between six different types of socialization content, for which they also report empirical evidence. (1) *Performance proficiency* refers to the extent to which the individual has learned the tasks involved in the job. According to Chao *et al.* (1994), the identification of what needs to be learned and how well an individual masters the required knowledge, skills, and abilities can be directly influenced by the socialization process. (2) the *people* dimension is defined as the establishment of successful and satisfying work relationships with other organizational members. (3) *Politics* concerns the individual's success in gaining information regarding formal and informal work relationships and power structures within the organization. (4) the *language* dimension describes the individual's knowledge of the profession's technical language as well as the language that is unique to the organization. (5) *Organizational goals and values* refer to the learning of specific organizational goals and values. (6) Finally, the *history* dimension is defined as transmission of an organization's cultural knowledge (myths, customs, traditions and rituals).

### 4.1.2. Stages in the Socialization Process

Although researchers generally agree that socialization is a continuous process (Taormina, 1997), most of them describe the socialization process in terms of distinct *stages or sequences of events involved in moving from an outsider to a fully socialized insider*. Fisher (1986) has summarized existing stage models and discerns three broad phases in the socialization process: (1) anticipatory socialization; (2) accommodation; and (3) mutual acceptance.

***Stage 1: Anticipatory socialization*** (Feldman, 1976; 1981; Louis, 1980). This stage represents the preparation – prior to entry – of the individual to occupy organizational positions (Van Maanen, 1976). More complete and accurate anticipatory socialization is expected to increase the ease and speed of assimilation into the organization. Many studies in the literature on anticipatory socialization focus on expectations or beliefs about what the new role will be like. These include expectations about working hours, type of work, supervision, promotion availability, and so on.

***Stage 2: Accommodation or encounter*** (Feldman, 1976; Porter, Lawler & Hackman, 1975). This stage has also been referred to as *initial confrontation* (Graen, 1976), or *adjustment* (Brief et al., 1979). This stage, covering the early entry period, is primarily concerned with the individual's initial encounter with the organization and is generally considered as the most crucial for effective socialization (Van Maanen, 1976). According to Feldman (1976), it is during this stage that the newcomer begins to master the tasks of the new job and develop interpersonal relationships with coworkers and supervisors. Also during this stage, expectations are confirmed or disconfirmed, ambiguity and conflict are encountered, reinforcement contingencies are discovered, and self and organizational evaluations of performance are compared.

***Stage 3: Role management or adaptation*** (Feldman, 1976; Louis, 1980). This stage has also been called *change and acquisition* (Porter et al., 1975), *mutual acceptance* (Schein, 1978), or *metamorphosis* (Van Maanen, 1976). This stage is concerned with the processes involved in becoming a fully accepted member of the organization.

There is no general agreement on the timing and duration of the encounter and adaptation stages. Authors suggest that this depends on the nature of the job and the organization as well as on the characteristics of the newcomer. In general the encounter stage is considered to take place during the first weeks or months at work, up to six months after entry, while the adaptation stage should occur during the subsequent months up to one year after entry (Bauer *et al.*, 1998; Fisher, 1986). After one year, a newcomer should be fully socialized into the new organization, but re-socialization can occur due to changes in the work environment, like change of job or department (Van Maanen & Schein, 1979).

### 4.1.3. The Role of Organizational Factors in Socialization

Traditionally socialization research has paid much attention to the organizational factors that affect newcomer socialization. Here we summarize the evidence about the role of organizational agents (section 4.1.3.1) and of organizational socialization tactics (section 4.1.3.2) in affecting newcomer socialization.

#### *4.1.3.1. Organizational Agents*

Researchers in the socialization field argue that the more rigorously an organization attempts to influence its employees, the more similar employees' values become to the organization's, since effective socialization inspires employees to think and act in accordance with the organization's interests (Chatman, 1991; Reichers, 1987). In Chapter 2 we have described the role of social comparison processes in schema development (section 2.4.3). Socialization researchers propose that through these social comparison processes newcomers come to understand their role within the new organization (Louis, 1990).

In this respect, several organizational insiders (so-called agents) are proposed to affect newcomer socialization through formal and informal interactions with the newcomer (Bauer *et al.*, 1998; Fisher, 1986). More specifically, ***peers***, ***supervisors*** and ***mentors*** are often referred to as agents of socialization (Louis, 1980; Reichers, 1987). By interacting with these agents, newcomers can gain a better understanding of events and practices within the organization. Agents can also facilitate socialization by providing newcomers with advice, job instructions, and social support (Louis, Posner & Powell, 1983; Major *et al.*, 1995). Several recent studies provide evidence that newcomers regard organizational insiders as important in facilitating their adjustment to

the organization. For instance, Louis *et al.* (1983) asked newcomers which people or events were most helpful to them in becoming adjusted to their new jobs. Frequent contact with peers and the supervisor were rated as most helpful. Both Chatman (1991) and Ostroff & Koslowski (1992) found that newcomers with mentors learn more about their organization than newcomers without mentors do.

#### *4.1.3.2. Organizational Socialization Tactics*

Socialization tactics refer to the ways in which the organization structures the experiences of individuals in transition from one role to another (Van Maanen, 1978). Van Maanen & Schein (1979) have proposed a typology of socialization tactics consisting of six bipolar dimensions. The first tactic, *collective vs. individual socialization* refers to the grouping of newcomers and putting them through a common set of experiences, as opposed to an individual treatment of each newcomer. The second tactic, *formal vs. informal socialization* is the practice of segregating a newcomer from regular organizational members during a socialization period, as opposed to not clearly distinguishing a newcomer from more experienced members. Thirdly, the *sequential vs. random socialization* tactic refers to the use of fixed steps leading to the assumption of the role versus the use of an ambiguous or randomly changing sequence. Fourthly, *fixed vs. variable socialization* describes to which extent a fixed timetable is used for the assumption of the role. The fifth tactic, *serial vs. disjunctive socialization* is defined as a process where the newcomer is socialized by an experienced member versus a process where a role model is not available. Finally, *investiture vs. divestiture socialization* describes the extent to which the identity and personality of the newcomer are affirmed versus denied.

According to Jones (1986), these six dimensions reflect one global polarity, which he calls the ***institutionalized vs. individualized dimension***, and which is related to different personal and role outcomes. More specifically he proposed that institutionalized tactics encourage newcomers to passively accept pre-set roles and maintain a status quo, thereby facilitating a custodial role orientation. On the other hand, individualized tactics encourage newcomers to question the status quo and to develop their own approach to their roles, thereby producing an innovative role orientation (Allen & Meyer, 1990; Ashforth & Saks, 1996; Saks & Ashforth, 1997b; Zahrly & Tosi, 1989).

Based on the framework proposed by Van Maanen & Schein (1979) and the subsequent refinements proposed by Jones (1986), several empirical studies have investigated the relationship between these tactics and socialization outcomes. In his own study, Jones (1986) found that institutionalized socialization was negatively related to role ambiguity, role conflict and intention to quit, and positively related to job satisfaction and organizational commitment. Similar findings have been found in subsequent research (Allen & Meyer, 1990; Ashforth & Saks, 1996; Baker & Feldman; Cable & Parsons, 2001; Lance *et al.*, 2000; Zahrly & Tosi, 1989). Cable & Parsons (2001) found that tactics with a sequential and fixed content and tactics emphasizing serial and investiture processes were positively related to newcomers' subjective fit perceptions and to changes in the congruence between newcomers' values and their perception of their organizations' values. Riordan *et al.* (2001) found that socialization tactics affect post-entry perceptions of person-job fit and self-esteem, as well as work-related attitudes such as organizational commitment and job satisfaction. In general, these studies provide evidence for the impact of socialization tactics on role orientation and attitudinal outcomes as job satisfaction and commitment.

### 4.1.4. Newcomer Adjustment as the Major Socialization Outcome

The attainment of knowledge about the socialization content areas during the different socialization stages should in turn result in newcomers' adjustment to the work environment (Lance *et al.*, 2000). From a more general career development perspective, we have already described the *Theory of Work Adjustment* (Dawis & Lofquist, 1984) in chapter 2. According to Lance *et al.* (2000), the quality of initial interactions of the newcomer

with the organization is critical to the positive adaptation of the newcomer to the new work context and positive adaptation results in stronger organizational functioning.

Adjustment refers to "*how newcomers reinterpret and revise both the meaning of work as it pertains to a particular organization and the concept of themselves as functioning members of that organization*" (Vandenberg & Self, 1993: 557). Studies have examined adjustment by measuring outcome variables like *role orientation* (Ashforth & Saks, 1996), *stress* (Ashforth & Saks, 1996), *commitment* (e.g. Ashforth & Saks, 1996; Meyer *et al.*, 1991; Mowday *et al.*, 1982; Lance et al., 2000), *job satisfaction* (e.g. Ashforth & Saks, 1996; Feldman, 1981), *job performance* (e.g. Feldman, 1981), and *intention quit* (e.g. Ashforth & Saks, 1996; Lance *et al.*, 2000).

## 4.2. NEWCOMER PROACTIVITY DURING THE SOCIALIZATION PROCESS

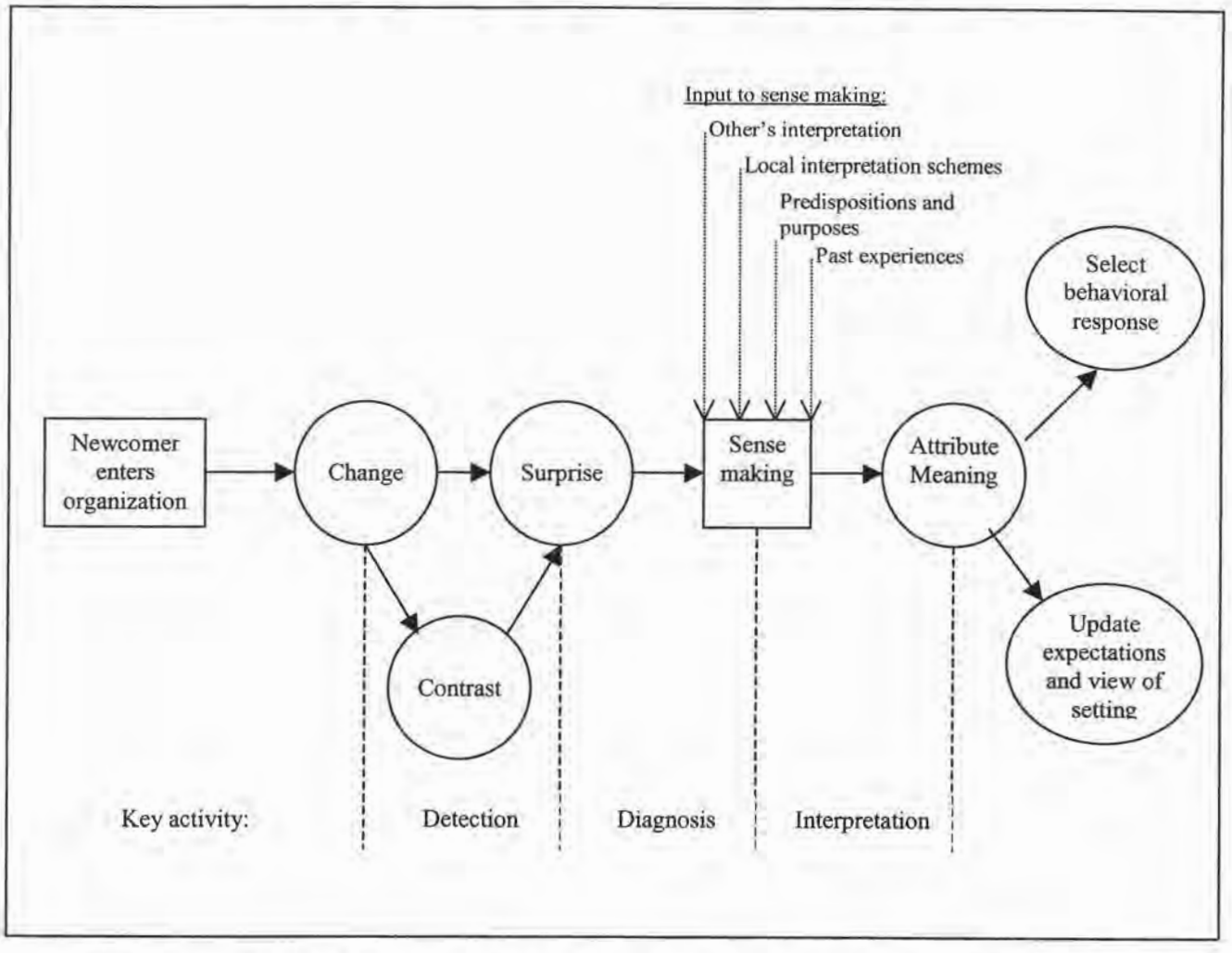
More recently, socialization literature has shifted its focus. Instead of concentrating on the role of organizational factors affecting newcomer socialization, researchers have started to assess the *proactive role of newcomers* in adjusting to their new environment (e.g. Bauer & Green, 1998; Miller & Jablin, 1991; Morrison, 1993a). In this respect, newcomers' *sense-making processes* and *information-seeking behaviors* have become of central interest, thereby making a concrete application of more basic theories on social perception and cognition. For this reason, and because of the relevance of understanding these processes with respect to the development of newcomers' psychological contracts, we will elaborate here on the major insights provided by socialization literature. First we discuss the process of sense making during socialization (section 4.2.1). Next we consider newcomer information seeking (section 4.2.2) and the factors affecting information-seeking behaviors (section 4.2.3). Finally we describe the role of information seeking in newcomer adaptation (section 4.2.4).

### 4.2.1. Sense Making during the Socialization Process

Louis (1980) has developed a social-cognitive theory describing the processes through which newcomers make sense of new and unfamiliar settings (i.e. entry into a new organization). She builds on the insights provided by theories on cognitive schemas and scripts. She argues that individuals' entry experiences are characterized by three major features: (1) *change*, (2) *contrast*, and (3) *surprise*. ***Change*** is defined as an objective difference in a major feature between a new and an old setting. Change is publicly noted and knowable. With the start of a new job, the newcomer experiences a change in role and often in professional identity. ***Contrast*** represents subjective differences between new and old settings by which newcomers define the new situation. It refers to the features of a new setting that are personally, in contrast to publicly, noticed and that are not knowable in advance. ***Surprise*** is the difference between an individual's anticipations and subsequent experiences in the new setting. It also represents an individual's affective reactions to any differences, including contrasts and changes. Surprise may be positive or negative.

Louis (1980) has developed a model for explaining how individuals cope with surprise, suggesting that sense making can be viewed as a recurring cycle comprised of a sequence of events occurring over time. The cycle begins as individuals form unconscious and conscious anticipations and assumptions, which serve as predictions about future events. Subsequently, individuals experience events that may be discrepant from predictions, i.e. surprises. Surprises trigger a need for explanation and evoke a process through which interpretations for discrepancies are developed. Based on this process meaning is attributed to surprises. Based on the attributed meanings, any necessary behavioral responses to the immediate situation are selected, understandings of actors, actions, and settings are updated and predictions about future experiences in the setting are revised. The updated anticipations and revised assumptions are analogous to *alterations in cognitive scripts*. The sense-making model, which is represented in Figure 4.1, focuses on cognitive processes that individuals employ in organizational settings to cope with surprise and novelty.

Figure 4.1: Sense Making during Organizational Entry (adapted from Louis, 1980: 242)



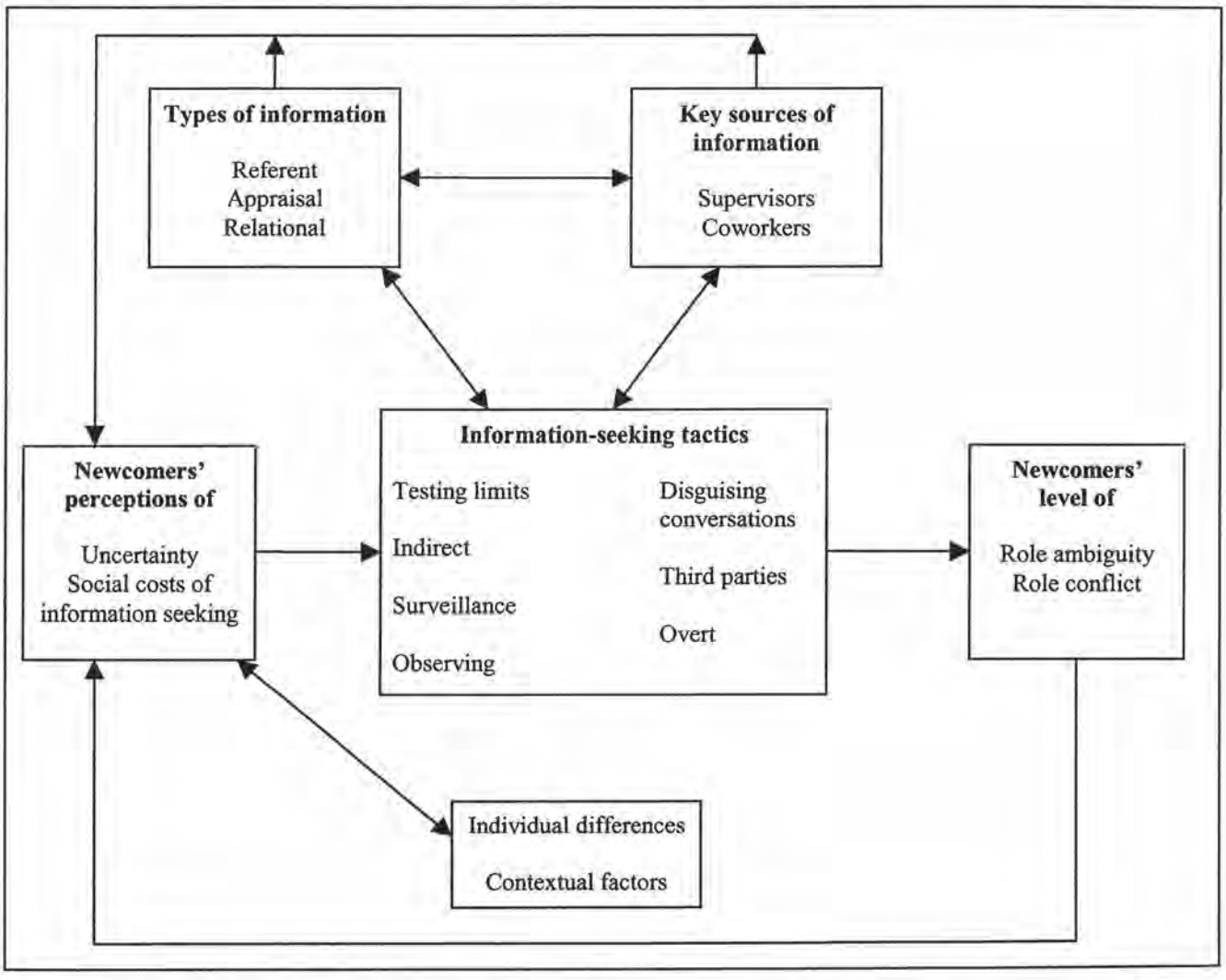

In making sense, individuals rely on a number of inputs, namely past experiences, more general personal characteristics including predispositions and personal needs, cultural assumptions or local interpretive schemes, and information about interpretations made by others in the situation. Louis (1980) argues that two types of input to sense making may be problematic for newcomers: *local interpretation schemes* and *others' interpretations.* Newcomers do not have an adequate history in the organization to interpret events in the same way as insiders and they are less acquainted with other employees, which makes it difficult for them to attach meaning to events and outcomes. As a result, newcomers often interpret actions, events and surprises in the new setting using interpretation schemes developed through their experiences in other settings. This may lead to inappropriate and dysfunctional interpretations, which in turn may create the perception of unmet expectations. Since individuals select reactions to events based at least in part on the meaning they attach to them, their interpretations of events can explain why individuals choose to stay with or to leave the organization, to work hard or not, etc. Louis (1980) concludes that newcomers need help in interpreting events in the new setting, and help in appreciating situation-specific interpretation schemes or cultural assumptions. Insiders are a potential source of such help.

### 4.2.2. Newcomer Information Seeking

Socialization researchers have elaborated on Louis' (1980) conception of sense making in novel situations by focusing on the *proactive processes* that newcomers use to make sense of their environment. Research suggests that a primary way in which newcomers are proactive during socialization, is by *seeking information.*

Information seeking enables newcomers to reduce uncertainty and thereby to understand and master their new environment (Ashford & Black, 1996; Miller & Jablin, 1991; Morrison, 1993a; 1993b; Ostroff & Koslowski, 1992; Reichers, 1987; Saks & Ashforth, 1997a; 1997b). In this way, newcomers are not considered as passive participants to the adaptation process, but they are conceived in an active way (Chan & Schmitt, 2000). Miller & Jablin (1991) propose a model in which the factors affecting information seeking during organizational entry are presented together with outcome variables. This model is represented in Figure 4.2.

Figure 4.2: Newcomer Information Seeking during Socialization (adapted from Miller & Jablin, 1991: 96)




To further clarify newcomer information seeking, we subsequently describe the *types* of information sought by newcomers (section 4.2.2.1), *modes* of information seeking (section 4.2.2.2) and information *sources* consulted by newcomers (section 4.2.2.3).

#### *4.2.2.1. Types of Information Sought*

Socialization researchers suggest that there are three ***types of information content*** that are critical to newcomers' development of role competencies and relationships with others (Miller & Jablin, 1991; Ostroff & Kozlowski, 1992): (1) *referent information*, (2) *appraisal information*, and (3) *relational information*. In Table 4.1, which is adapted from Miller & Jablin (1991), we present the three types of information together with examples of the kinds of information that newcomers might seek.

Table 4.1: Types of Information Sought by Newcomers (Adapted from Miller & Jablin, 1991: 99)

| INFORMATION CATEGORIES AND EXAMPLES | | | |
|---|---|---|---|
| **Referent information** What is required to function on the job | | **Appraisal information** Degree of functioning successfully on the job | **Relational information** Nature of relationships with others |
| Job instructions | Reason for doing a task | Performance feedback | Extent of fitting into social environment |
| Job rationale | Job procedures | Potential for advancement | Social/affective support |
| Organizational procedures | How to get a promotion or raise | Appropriateness of social behaviors | Others' personality characteristics |
| Organizational goals | New ideas or ways to do things | Adequacy of basic skills & abilities | Others' likes/dislikes |
| Nuances of rules | What work needs to be done | Quality of work efficiency in accomplishing tasks | Managing job pressures and role conflicts |
| Informal networks | How to get job training | Adequacy of performance under pressure | Personal goals |
| Amount of responsibility | Interpretations of activities & events | | Overcoming of a new self-image |
| Job goals | Meaning of organizational symbols | | Feelings about particular coworkers/supervisors |

Empirical findings suggest that the type of information newcomers are looking for, changes during the first months after organizational entry. Initially, information seeking is primarily focused upon acquiring relational information. Over time, the frequency with which this type of information is sought decreases, while newcomers seek more referent and appraisal information (Morrison, 1993b; Ostroff & Kozlowski, 1992).

#### *4.2.2.2. Modes of Information Seeking*

Information-seeking behaviors are usually defined as *deliberate, conscious efforts* (Salancik & Pfeffer, 1978). However, information-seeking tactics range in their overtness and the specificity of the information sought. Miller & Jablin (1991) describe a wide range of information-seeking behaviors that newcomers may use in order to obtain information: (1) overt questions; (2) indirect questions; (3) consulting third parties; (4) testing limits; (5) disguising others' conversations; (6) observing; (7) surveillance or monitoring. These can be categorized into two primary modes of information seeking, which Ashford & Cummings (1983) have called ***inquiry*** and ***monitoring***. Inquiry refers to directly asking for information, while monitoring refers to paying attention to situations or behaviors in order to obtain information cues in a more passive way.

Empirical research suggests that newcomers tend to rely primarily on observation of others rather than on direct information-seeking tactics (Morrison, 1993b; Ostroff & Kozlowski, 1992), although Morrison (1993b) also demonstrated that this depended on the type of information sought. More specifically, for obtaining technical information newcomers engaged in inquiry more often than in monitoring.

#### *4.2.2.3. Information Sources*

Several potential information sources exist that newcomers can use for obtaining information: (1) messages from management; (2) members of the their immediate role set (supervisor, coworkers); (3) other organizational members; (4) extra-organizational sources; or (5) the task itself. Researchers suggest that ***coworkers*** and the ***immediate supervisor*** are the most important sources because of their availability and because of the relevance

of the information they can provide (Chan & Schmidt, 2000; Louis, 1990; Miller & Jablin, 1991; Morrison, 1993b). Additionally, Ostroff & Kozlowski (1992) also refer to the newcomer's ***mentor*** as a relevant source of information. These sources correspond with the major groups of organizational agents considered to be relevant to newcomer socialization within the more traditional socialization literature and they also correspond with the groups of organizational agents studied within psychological contract research.

Morrison (1993b) has investigated how specific information-seeking sources vary according to the type of information that newcomers are seeking. While newcomers asked for social feedback and normative information from coworkers more frequently than from supervisors, for technical information they consulted supervisors more frequently than coworkers. Building on these results, Chan & Schmitt (2000) found that over time, the extent to which newcomers asked for technical information from coworkers decreased, while it remained constant for supervisors. On the other hand, the extent to which newcomers asked for referent information from coworkers remained constant over time, while it increased for supervisors. At a global level, Chan & Schmitt (2000) confirmed Morrison's (1993a; 1993b) findings that information seeking decreases over time, but they demonstrated that this change pattern differed depending on the interaction between type of information and information sources.

### 4.2.3. Factors Affecting Newcomer Information Seeking

Both individual and organizational factors have been examined as antecedents of newcomer information seeking. In this section we briefly summarize the evidence for both.

#### *4.2.3.1. Individual Factors*

At the *theoretical level*, Miller & Jablin (1991) consider two individual-level factors that will impact individuals' information-seeking tactics: (1) newcomers' degree of ***uncertainty*** about appropriate behaviors and about the behavior-outcome relations that can be expected; and (2) the ***social costs*** the newcomer perceives to be related to information seeking (e.g. negative relational consequences that arise from asking information). If newcomers perceive social costs to be high or when they feel uncertain, they will be more likely to use information-seeking tactics that are less overt in nature, like observing, surveillance or disguising conversations. Newcomers will use more overt information-seeking tactics when they anticipate few negative consequences and when they perceive overt information-seeking tactics to be situationally normative (Miller & Jablin, 1991).
According to Louis (1990), newcomers' level of ***cognitive complexity*** will affect their information seeking. Individuals who are more integratively complex would seek out more information than do less integratively complex individuals. They would also consult more diverse sources of information. Individuals' level of ***self-efficacy*** has also been suggested to affect newcomers' information-seeking behaviors (Jones, 1986).
Finally, Ashford & Cummings (1983) explain how the ***personal goals*** that individuals attempt to achieve within the organization may shape the feedback-seeking processes that individuals engage in. According to Ashford & Cummings (1983; 1985), goals play an important role as determinants of the type of feedback information useful to an individual and of the utility of various sources of feedback in the information environment.

At the *empirical level*, these and other individual factors have been assessed. The relationship between ***self-esteem*** and information seeking has been investigated by Hall (1971) and by Ashford & Cummings (1985). These studies show that individuals with higher self-esteem engage in more information seeking and more risk taking which leads them to master their occupational tasks more confidently. Related to this, Morrison (1993b) found that newcomers' level of ***self-confidence*** influenced the type of information newcomers asked their supervisor for. High self-confident newcomers did ask their supervisors for referent and performance feedback more frequently than they asked their peers. Self-confidence was also significantly correlated with the frequency of asking supervisors for referent information and for performance feedback. Major & Koslowski (1997) showed that ***self-efficacy*** moderated the relationship between task situation and information seeking. In situations of high

task interdependence and accessibility, newcomers low on self-efficacy proactively sought task-related information more frequently than high self-efficacious newcomers. Ashford & Cummings (1985) found that individuals with a low ***tolerance for ambiguity*** use more direct information-seeking tactics than individuals with a high tolerance for ambiguity. Another individual factor that has been found to influence information seeking is an individual's ***desire for control***. Ashford & Black (1996) demonstrated that the greater organizational newcomers' desire for control in their new organization, the greater their information- and feedback-seeking behaviors during the first six months after organizational entry. Finally, Chan & Schmitt (2000) have investigated the role of ***proactive personality*** and ***previous transition experience*** but they found no strong impact of these variables on newcomer information seeking.

#### *4.2.3.2. Organizational Factors*

According to Miller & Jablin (1991), the ***socialization tactics*** used by the organization (see Section 4.1.3.2) affect newcomers' information-seeking behaviors. This proposition has received empirical support from a study conducted by Saks & Ashforth (1997b). The pattern of results found in this study suggests that institutionalized socialization tactics are associated with more frequent information seeking from other newcomers, but also from senior coworkers and supervisors. This effect was significant for more direct feedback seeking and for monitoring behaviors. More specifically, it was the dimension "collective – individual" of socialization tactics that was most predictive in explaining feedback seeking and monitoring. According to Miller & Jablin (1991) *organizational culture* and *information-sharing norms* as well as newcomers *job level, department affiliation,* and *task type* may also affect the extent and manner in which they seek information.

### 4.2.4. The Role of Information Seeking in Newcomer Adjustment

Miller & Jablin (1991) propose that newcomers' information-seeking behaviors may reduce their level of ***role ambiguity and role conflict***. Evidence for this has been provided by Ashford (1986) and Ashford & Cummings (1985) who both found a positive correlation between frequency of feedback seeking and role clarity. Empirical evidence also exists for a positive relationship between frequency of newcomer information seeking and ***satisfaction*** (Morrison, 1993a; Ostroff & Koslowski, 1992; Saks & Ashforth, 1997b), ***performance*** (Morrison, 1993b; Saks & Ashforth, 1997b), and ***commitment*** (Ostroff & Koslowski, 1992; Saks & Ashforth, 1997b). A negative relationship has been observed between frequency of information seeking and ***intentions to leave*** the organization (Morrison, 1993a; Ostroff & Koslowski, 1992; Saks & Ashforth, 1997b). Finally, Saks & Ashforth (1997b) found a negative relationship of information seeking with ***anxiety*** and with ***actual turnover***. These adaptation outcomes relate to those studied in traditional socialization research (see Section 4.1.4).
Saks & Ashforth (1997b) also observed that the effects of socialization tactics on adaptation outcomes were partially mediated by information seeking, suggesting that both organizational and individual actions play a role in newcomer socialization.

As Chan & Schmitt (2000) have noticed, these traditional outcomes may only be distally related to newcomer proactivity. Therefore, recent studies on newcomer information seeking have begun examining more proximal adaptation outcomes, including task mastery, role clarity and social integration (Chan & Schmitt, 2000; Morrison, 1993a; Saks & Ashfort, 1997a). These outcomes are closely related to the content dimensions of socialization we have discussed in Section 4.1.1. They can be considered as outcomes that are commensurate with the content dimensions about which information is acquired and thus as more specific indicators of adaptation. (1) ***Task mastery*** refers to newcomers' performance and mastery of their job tasks, (2) ***role clarity*** refers to newcomers' understanding about what others expect of them in their job, and (3) ***social integration*** refers to the development of personal relationships with coworkers and integration into the work group (Chan & Schmitt, 2000).
Morrison (1993a) found that the frequency with which newcomers sought technical information and performance feedback was related to task mastery. This observation corresponds with results obtained by Saks &

Ashforth (1997b). Role clarity was related to the frequency with which newcomers sought referent information and performance feedback, and social integration was related to the frequency with which they sought normative information (Morrison, 1993a). At a more general level, Chan & Schmitt (2000) empirically demonstrated that task mastery, role clarity and social integration increased over the course of the socialization period. However, the relationship between the change trajectories of information seeking and attainment of these three types of mastery was not unequivocal.

## 4.3. NEWCOMER PSYCHOLOGICAL CONTRACT DEVELOPMENT

As we have outlined in Chapter 1, little theoretical or empirical evidence is available about newcomer psychological contract development. Although the impact of both individual and organizational factors on the psychological contract is generally recognized, only few scholars have explicitly attempted to incorporate these in a more dynamic theory on psychological contract *development* or have addressed those relationships at the empirical level. In this section we discuss the available theoretical and empirical information on newcomer psychological contract development that we have found in the literature.

According to Robinson *et al.* (1994), there are two reasons why the psychological contract changes during the employment relationship. First, the exchange relationship as it unfolds over time, together with the employee's perceptual biases, will cause employees to perceive their employment relationship differently. Second, the actual behaviors of both parties will affect newcomers' psychological contract perceptions, i.e. the information newcomers obtain about their own behaviors and about the behaviors of organizational agents will affect their perception of what they owe their employer and what their employer owes them.

In this section we successively discuss two theories on psychological contract development that have been put forward by psychological contract researchers (section 4.3.1) and two theoretical contributions on the stages of psychological contract development described from a socialization perspective (section 4.3.2), and we summarize the available empirical evidence on changes in newcomers' psychological contracts (section 4.3.3) and the principles underlying these changes (section 4.3.4).

### 4.3.1. Conceptual Models on Psychological Contract Development

The models on psychological contract development put forward by Rousseau (1995) and Shore & Tetrick (1994) are the only conceptual models we have found in the literature. Although these models need further empirical validation, they offer a useful starting point for improving our understanding of psychological contract development. Other scholars have also presented models that incorporate the dynamic element of the psychological contract. For instance, Herriot and his colleagues have developed a model representing the negotiation process between individual and organization that leads to a mutually shared psychological contract (Herriot *et al.*, 1998; Herriot & Pemberton, 1996; 1997). Although this model is relevant for managerial use, it contains no conceptual propositions that are useful for exploring psychological contract development from a more scientific point of view. In the same regard, the model presented by Schein (1978) on the matching process between individual and organization provides some relevant input but its usefulness is also mainly situated at the practical, managerial level. Finally, Guest and his colleagues (e.g. Guest & Conway, 1997; 1998) describe a model containing both individual and organizational antecedents of the psychological contract. However, this model needs further theoretical elaboration and refinement. As to date, it has not been developed in detail and it is restricted to a visual representation of those antecedents that these authors assume to be useful.

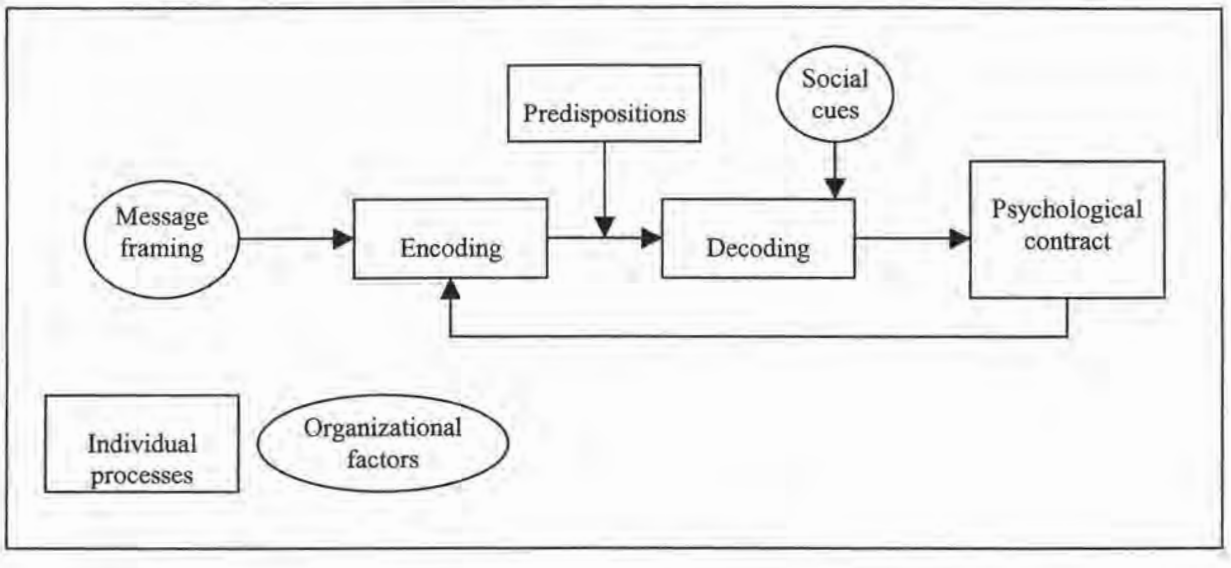
Both the model developed by Rousseau (1995) and the model developed by Shore & Tetrick (1994) depart from the central assumption that ***the psychological contract develops within a dynamic environment in which the individual interacts with multiple organizational agents.*** Both the individual and the organization (represented

by diverse agents) approach the employment relationship with a set of expectations. These expectations are proposed to influence the development of the contract. An individual's psychological contract will emerge as a result of his or her interaction with the organizational environment. Two sets of factors operate in forming the psychological contract: *external factors*, namely messages and social cues from the organization or social setting, and *internal factors*, namely the individual's internal goals and predispositions. We have already discussed both sets of antecedents in the chapter 3. Here we concentrate on the *processes* of changes in the psychological contract implied by these models.

#### *4.3.1.1. Psychological Contract Development according to Rousseau (1995)*

The model developed by Rousseau (1995) is represented in Figure 4.3. This model focuses on *the processes through which messages, conveyed by the organization, become interpreted as promises by the individual.*

Figure 4.3: Psychological Contract Development according to Rousseau (1995: 33)




In general, Rousseau (1995) states that the psychological contract develops through discontinuous information processing. This means that contract-related information is only sought and actively processed at certain times and that contract perceptions tend to endure until a noticeable signal conveys a break or interruption. In novel situations, like the organizational socialization period is to newcomers, employees will process information in a systematic and controlled way. Over time, as new employees become more integrated within the organization, information processing becomes more automatic. In this sense Rousseau's (1995) conception of psychological contract development strongly builds on the basic assumptions of theories on social perception and cognition we have discussed in Chapter 2 (section 2.4.3).

As Rousseau states: "*People do not continuously seek and scan for information... Recruits ask a lot of questions while they are newcomers and, once they start getting the answers they expect, they stop asking*" (1995: 31). The most active search for information is early on in the initial phases of the employment relationship, i.e. during socialization. During this period, organizations tend to make active efforts to socialize newcomers and the newcomers themselves tend to actively seek for information about what to do and what to expect. Because they actively pay more attention to information, new hires (or transferees), unlike veterans, are more likely to notice, seek out and observe information related to the conditions of their employment relationship.

In her theory of psychological contracting, Rousseau (1995) considers two central parties, i.e. the individual employee and the organization. In the previous chapter we have already discussed how the characteristics of both parties operate as antecedents of the psychological contract. Here we further elaborate on the two major internal

processes, *encoding* and *decoding*, that take place in the perception and interpretation of psychological contract messages by the newcomer. According to Rousseau (1995), these processes are more important in affecting the psychological contract than the messages themselves.

***Encoding*** refers to the processes individuals use to interpret organizational actions as promises. According to Rousseau (1995), whether individuals interpret certain organizational actions as promises will depend in the first place on whether the individual receives and recognizes a message. She considers three conditions that are necessary for an individual to attribute a credible or intended promise to a message conveyed by a contract maker. The first is *being perceived as having the power, authority, or capacity to make that commitment.* Supervisors or managers who are perceived as influential are more likely to make commitments that are relied on. Second, *operate in a context where promise making is deemed appropriate.* Messages organizations express regarding commitments are likely to be viewed as promissory when conditions signal to individuals the need for future commitments and planning. Examples are the recruitment interview or personnel actions involving changes in status, communication of performance standards or changes in organizational structure or strategy. Third, *behave in ways consistent with the commitment made.* Consistency of messages received makes the promisor's intentions easier to understand and more credible.
Messages sent consistently over time become internalized to the point that they are simply assumed. They become integrated in the person's mental script about the employment relationship and operate almost unconsciously. On the other hand, messages regarding new contract terms nay not be truly believed until the organization has taken enough action to convey that they truly intend to create a new set of terms.

***Decoding*** reflects the judgements people make regarding the standards of behavior that must be met to fulfill commitments made by themselves and by the organization (Rousseau, 1995). Based on interpretation of promissory messages, those promises are turned into behavioral standards. According to Rousseau, there is no way for individuals to monitor compliance with contract terms until a behavioral standard is formulated. While individual predispositions influence the encoding process, Rousseau assumes that social cues sent by referent others will influence the interpretation of what contract terms mean, i.e. the decoding process.

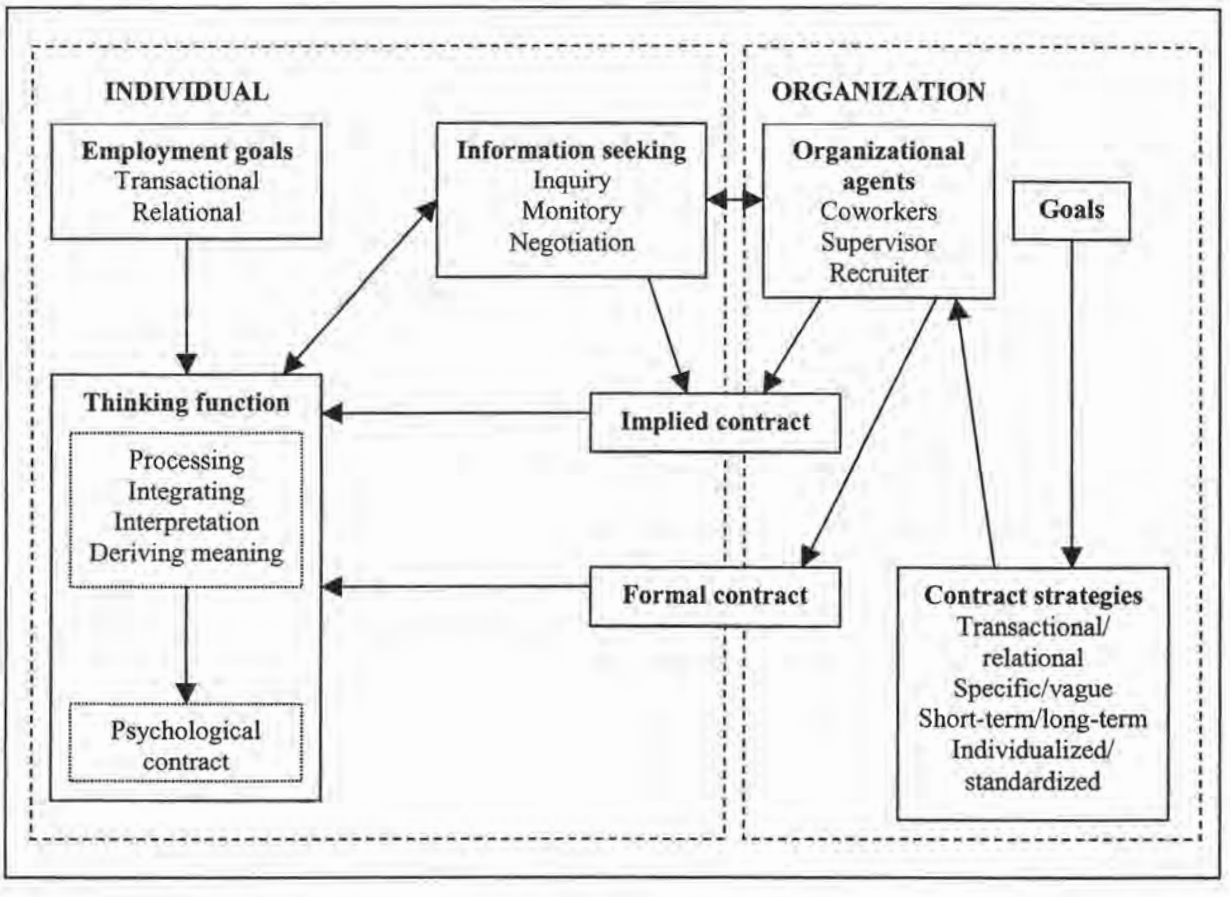
Comments on Rousseau's theory
The major contribution of the model put forward by Rousseau (1995) is the social-cognitive perspective taken to describe the development of the psychological contract. Psychological contract development is strongly related to schema development, thereby making it possible to use insights from the more long-standing research tradition on schema development (cf. section 2.4.3). Although Rousseau (1995) conceptualizes the psychological contract as containing both promissory beliefs about organizational inducements and employee contributions, her theory on the creation of the psychological contract focuses almost exclusively on the perception and interpretation of promissory beliefs about organizational inducements. In her model she builds on well-developed theories on social information processing. However, as to date, little empirical evidence exists to support the proposed relationships. Therefore, this model needs empirical validation. Finally the process of schema development is not explicitly discussed with a focus on newcomers. Rousseau proposes that the processes of encoding and decoding are more likely to take place in new situations and that they will occur less explicitly in more familiar situations, i.e. as newcomers become more acquainted with their employment relationship. This thesis corresponds with Louis' (1980) conception of surprise and sense making during organizational entry. However, Rousseau (1995) gives no further account of how the psychological contract develops or changes differently depending on the stage of the employment relationship. This could be done by relating psychological contract development more explicitly to theories on newcomer socialization.

#### *4.3.1.2. Psychological Contract Development according to Shore & Tetrick (1994)*

Shore & Tetrick (1994) focus more explicitly on psychological contract development among organizational *newcomers*. Their model is represented in Figure 4.4. Two parties are central in this model: the individual and

the organization. Both parties approach the employment relationship with a set of expectations. The development of the psychological contract will result from the interaction between both parties. Because of this interactional process, the resulting psychological contract is unique to each individual. In their model they thus apply the principles of person-environment fit (e.g. theory of work adjustment, cf. section 2.4.4) to psychological contract development. They also take a social-cognitive perspective, by including newcomer information seeking and the role of individual motivations and goals in information seeking.

Figure 4.4: Psychological Contract Development according to Shore & Tetrick (1994: 96)




Shore & Tetrick (1994) view the development of the psychological contract as a "*deliberate goal-oriented process, in which an individual attempts to establish an agreement with his or her employing organization that will address a variety of employment objectives*" (1994: 97). They rely upon information processing theories to explain how individuals look for relevant information. Employees may use a variety of information-seeking strategies to gather information regarding their psychological contract, including inquiry, monitoring, and negotiation. Direct inquiry and negotiation will be most often used for acquiring information on transactional contract issues, while monitoring will be used for seeking relevant information on relational contract issues. Monitoring means that individuals make interpretations and inferences of the behaviors they observe by incorporating this information into their particular goals. The authors assume that monitoring and inquiry will also influence the implied contract, while negotiating will be prevailing in the formal contracting process. Therefore, they also propose that more explicit forms of contracting (formal and implied contracts) will influence more implicit forms of contracting (psychological contracts). The fact that individuals differ in their particular employment goals explains why psychological contracts are unique to the individuals holding them.

Shore & Terick (1994) refer to social information processing theory (Salancik & Pfeffer, 1978) to argue that newcomers will be likely to base their psychological contract perceptions on information which is only partially generated by the external environment. They argue that individuals are likely to store and recall incomplete

information and to fill in information based on existing schemas. Thus, newcomers will only incorporate part of the available information and will give meaning to that information in their own unique way (Shore & Tetrick, 1994). This process will be affected by the newcomers' personal career motives and goals.

Comments on Shore & Tetrick's theory

While Rousseau's (1995) model is more micro-level (actually an application of schema theory), the model presented by Shore & Tetrick (1994) is broader in that it focuses more on the individual within the organizational context. They depart from the same basic assumption that psychological contract development can be conceptualized as a specific type of schema development but they describe this process more from an interactional perspective. Here the focus is more on interaction between newcomer and organization and how the newcomer seeks for information, while Rousseau's focus is more on schema development as such and how this is affected by internal and external factors. These authors are the first to explicitly relate newcomer proactivity to psychological contract development. Thereby they create a link with socialization literature and the role of information seeking in newcomer adaptation. Again, however, this model does not explicitly addresses changes in *newcomers* psychological contract over time. For example, Shore & Tetrick (1994) do not explicate what are the conditions that will cause newcomers to change their information seeking (e.g. whether there is a decrease of information seeking over time, or what conditions will cause an increase in information seeking after some time). We conclude that this model provides an important theoretical contribution to psychological contract development but that it needs further empirical validation.

### 4.3.2. Stages of Psychological Contract Development

While Shore & Tetrick (1994) have applied the insights about newcomer information seeking from socialization literature to the psychological contract, other authors have related the *socialization stages* to psychological contract development. In this respect, both Anderson & Thomas (1996) and Nelson, Quick & Joplin (1991) have described how psychological contracts are formed during the socialization period. In this paragraph we describe psychological contract development during the anticipatory, encounter and acquisition stages of socialization.

Both Nelson *et al.* (1991) and Anderson & Thomas (1996) conceptualize socialization as *a process of uncertainty reduction that takes place through interactions between the newcomer and key organizational insiders.* They point out that *one role of the psychological contract is to decrease uncertainty and increase the perceived predictability of organizational actions.* As the interaction process between newcomer and organization begins, establishing reliability may be a key factor in reducing uncertainty and distress for both parties. Secure relationships that evolve among individuals are the basis for positive psychological contracts in an organization (Nelson *et al.*, 1991).

During the ***anticipatory socialization phase***, expectations and images are formed in the minds of newcomers. Newcomers' expectations may vary significantly in their correspondence with the organizational reality. The ***"anticipatory psychological contract"*** (Anderson & Thomas, 1996) at this stage is *a naïve and imperfect schema about a preliminary deal that enumerates what the organization expects its employees to contribute and what rewards employees can expect to receive from the organization* (Anderson & Thomas, 1996). This conception of an anticipatory psychological contract corresponds with the notion of *anticipatory met expectations*, as recently discussed by Lance *et al.* (2000). These authors consider anticipatory met expectations as the basis from which individuals infer their feelings, beliefs and attitudes regarding the organization. They relate anticipatory met expectations to the anticipatory psychological contract and refer to the *"powerful role possessed by individual psychological contracts in the sense that perceptions of met expectations represent evaluations of the nature of one's exchange relationship with the organization"* (2000: 116). They argue that the stronger this anticipatory psychological contract, the more likely individuals will adjust positively to the organization.

In the anticipatory socialization stage, organizational agents involved in recruitment and selection and the information they exchange with the newcomer have a major impact on their anticipatory expectations. During recruitment, not only specific transactional arrangements are discussed (e.g. pay, type of work), but employees can also infer agreements without explicit communication (e.g. based on employers body language or perceptions of organizational characteristics) (Shore & Tetrick, 1994).
Although the needs of both individuals and organizations during this pre-entry stage are primarily informational, newcomers will seek to establish reliability of insiders when gathering information. (Nelson *et al.*, 1991). Anderson & Thomas (1996) propose that newcomer characteristics will mediate the individual constructions of the anticipatory psychological contract. They argue that, as a subjective set of perceptions and expectations, the anticipatory psychological contract is subject to individual differences in form and content. Individual characteristics contributing to these differences in interpretation are personality, knowledge, values, interpersonal skills and career motivations.
Together the information obtained (explicitly or implicitly) during recruitment and the newcomers' individual characteristics will set the stage for further refinement of the psychological contract during the early employment period (Shore & Tetrick, 1994).

During the ***encounter phase*** (i.e. the initial months at work), newcomers experience the real demands at work, in exchange for rewards such as salary, promotions, and recognition. This is *the stage at which the psychological contract is formed and reliability is actively being tested* (Nelson *et al.*, 1991). Lance *et al.* (2000) propose that actual experiences encountered after entry serve as a basis for individuals to reevaluate their expectations and assumptions about their employment relationship, i.e. their psychological contract.
The frequency and nature of interactions with others during this stage may influence how newcomers attribute meaning to and make sense of organizational realities. Supervisor, mentors, the immediate work group and other newcomers are important sources of information during this stage (Anderson & Thomas, 1996). Newcomers' experiences in this stage will influence the further development of their psychological contracts, including the adjustment of the anticipatory psychological contract. The information obtained during socialization helps to reduce the uncertainty felt by newcomers (Louis, 1980; Nelson *et al.*, 1990; Morrison, 1993a; 1993b). This uncertainty refers to the fact that on the first days at work, expectations about fulfilling work-related wants and desires are based largely on newcomers' idealized or poorly defined views of their employment relationship (Lance *et al.*, 2000; Vandenberg & Self, 1993). Actual work experiences, therefore, serve as a basis for individuals to reevaluate their expectations and assumptions about the organization.
The models of psychological contract development put forward by Rousseau (1995) and Shore & Tetrick (1994) are mainly focused upon this stage of the socialization process. According to Rousseau (1995), it is shortly after entry that recruits search most actively for information about their employment relationship and this is also the period during which the organization most actively provides information to the newcomer. Because of this intense exchange of information, the psychological contract schema is actively developed and adapted to reality. During the next stage of socialization this schema will be further adapted but this adaptation will occur less actively and will gradually become more automatic (Rousseau, 1995).

The ***phase of change and acquisition*** involves the further development of a process of mutual accommodation between newcomer and organization. The newcomer alters the role he/she is fulfilling and is in turn altered by the organization. During this stage, *newcomers weigh the equity of the psychological contract* (Nelson *et al.*, 1991). Schein (1978) says that successful socialization is characterized by mutual acceptance, which is an initial approval of the psychological contract. Mutual acceptance does not terminate the contracting process. Rather, it is a ratification and a chance for renegotiating and feedback. According to Kotter (1973), the number of matches in the psychological contract, based on individual and organizational characteristics, determines effective adjustment. One of the outcomes of this phase is *a revised psychological contract that will guide the individual's further expectations and behaviors within the organization* (Anderson & Thomas, 1996). Relating this to Rousseau's (1995) model, it means that at the end of this phase, the psychological contract schema has become well-established and will serve as a basis for interpreting and evaluating experiences.

### 4.3.3. Empirical Evidence on Changes in Newcomers' Psychological Contracts

Here we review two empirical studies on changes in newcomers' psychological contract perceptions, conducted by Robinson, Kraatz & Rousseau (1994) and Thomas & Anderson (1998). Within the psychological contract these are the only studies that have empirically assessed psychological contract development. Although in principle, research on newcomer psychological contract development could focus on changes in the three facets of the construct (content, features or evaluation), both studies only address changes in the *content* of the psychological contract, i.e. changes in perceived promises over time. They assess whether there is an increase or decrease in promissory beliefs about employer inducements and / or employee contributions over time and which content dimensions become more or less prevalent over time.

#### *4.3.3.1. Changes in Graduate Recruits' Psychological Contracts (Robinson, Kraatz & Rousseau, 1994)*

Robinson *et al.* (1994) empirically examined psychological contract development using a sample of 96 graduate recruits. We have also reviewed this study in our discussion on the relationship between psychological contract evaluation and outcome variables (section 2.3 in Chapter 2 and Appendix 2.4). Their respondents were surveyed a first time at the end of their MBA-studies, when they had just signed an employment contract (T1), and a second time two years later (T2). Robinson *et al.* (1994) assessed psychological contract perceptions using single item measures. Paired sample *t*-tests were conducted to assess differences between the individual obligations at T1 and T2. The results are summarized in Table 4.2.

Table 4.2: Changes in Newcomers' Promissory Beliefs about Employer and Employee Obligations (adapted from Robinson, Kraatz & Rousseau, 1994: 148)

| | **T1 Perception**[1] (before entry) | **T2 Perception**[1] (2 years after entry) | **Direction of Change** |
|---|---|---|---|
| **EMPLOYER OBLIGATIONS** | | | |
| 1. Advancement | 2.90 | 3.76 | Increase |
| 2. High pay | 2.76 | 3.52 | Increase |
| 3. Merit pay | 4.11 | 4.45 | Increase |
| 4. Training | 3.61 | 3.35 | Decrease |
| 5. Job security | 2.42 | 2.37 | Not significant |
| 6. Career development | 3.81 | 3.95 | Not significant |
| 7. Support with personal problems | 2.04 | 1.96 | Not significant |
| **EMPLOYEE OBLIGATIONS** | | | |
| 1. Overtime | 3.91 | 3.68 | Decrease |
| 2. Loyalty | 3.87 | 3.24 | Decrease |
| 3. Extra-role behavior | 3.30 | 3.13 | Not significant |
| 4. Advance notice if taking a job elsewhere | 4.15 | 3.39 | Decrease |
| 5. Willingness to accept a transfer | 2.52 | 2.26 | Decrease |
| 6. No competitor support | 3.32 | 3.54 | Not significant |
| 7. Protection of proprietary information | 4.85 | 4.74 | Not significant |
| 8. Minimum stay of 2 years | 2.99 | 2.05 | Decrease |

[1] All scores were on five-point scales ranging from (1) = not at all obligated to (5) = very highly obligated

In general, these results indicate that newcomers' psychological contracts changed during the first two years after entry. More specifically for most employer inducements there was an increase in promissory beliefs, while for most employee promises there was a decrease in promissory beliefs.

The increase in *employer obligations* was significant for those inducements that are more economic (high pay and merit pay) and for advancement opportunities. For career development there was also an increase in promissory beliefs but this difference was not significant. Beliefs about training decreased significantly. This could be explained by the fact that initially newcomers feel a stronger need for training to become more acquainted with their job but that after two years they have received sufficient training or have obtained

sufficient experience to feel confident in fulfilling their role within the organization. Finally, beliefs about job security and support with personal problems, which are more reflective of socio-emotional concerns, did decrease although not to a significant extent.

For most *employee obligations* a significant decrease was observed, the only exception being promissory beliefs about the refusal to support the employer's competitors. For this obligation a non-significant increase was observed. It could be that this type of obligation is the most explicit and the one that is most likely to be strongly punished by organizations in case of violation. Therefore it is possible that there is no tendency to decrease perceived obligations over time.

Based on their findings Robinson *et al.* (1994) conclude that over time newcomers' psychological contracts tend to become more transactional. This is the first study that has empirically shown that over time changes in psychological contracts take place. However, a number of remarks could be made that should be addressed in future research. First, the use of single items to study changes restricts the reliability and validity of the results. Second, considering the two-year time span between the first and the second data collection wave, it is difficult to interpret these changes. For example we do not know when these changes took place during that period, i.e. if they occurred gradually or if there was a major shift, for example after the first six months. Finally, we have no information on the relationship between changes in perceived employer and employee promises over time. More than two data collection waves are needed to assess these relationships.

#### *4.3.3.2. Changes in Army Recruits' Psychological Contracts (Thomas & Anderson, 1998)*

Thomas & Anderson (1998) have studied psychological contract changes within a shorter time span after organizational entry, i.e. during the first eight weeks. Departing from socialization literature, these authors propose that changes in the psychological contract already occur shortly after entry and that they already reach a degree of stability as early as four months after entry. Their sample consisted of 249 newcomer recruits into the British Army. A first measurement took place at the first day of the training new recruits have to follow (T1), the second measurement was conducted at the end of the training eight weeks later (T2). These authors only measured changes with respect to the employer part of the psychological contract, i.e. changes in expectations towards organizational inducements. Changes in mean scores from T1 to T2 were assessed using paired *t*-tests for each individual inducement. In Table 4.3 we summarize their findings.

Table 4.3: Changes in Newcomers' Expectations about Employer Inducements (adapted from Thomas & Anderson, 1998: 755)

| | **T1 Perception**[1] (day 1 of training) | **T2 Perception**[1] (8 weeks after entry) | **Direction of Change** |
|---|---|---|---|
| **EMPLOYER INDUCEMENTS** | | | |
| 1. Career prospects | 6.13 | 6.10 | Not significant |
| 2. Job security | 6.00 | 6.25 | Increase |
| 3. Job satisfaction | 5.89 | 6.02 | Not significant |
| 4. Social / leisure aspects | 5.14 | 5.48 | Increase |
| 5. Pay | 4.91 | 5.16 | Not significant |
| 6. Effects on family | 4.64 | 4.94 | Increase |
| 7. Accommodation | 4.63 | 5.10 | Increase |

[1] All scores were on seven-point scales ranging from (1) = expected to be very poor to (7) = expected to be very good

These authors found a significant increase in expectations about four out of the seven types of employer inducements measured (job security, social and leisure time aspects, family effects, and accommodation). These findings suggest that the first two months after entry are important in psychological contract formation and that it is needed to take this shorter time span into account in future research. Comparing the changes found in this study with the results obtained by Robinson *et al.* (1994), in this study newcomers' psychological contracts appear to become more relational instead of more transactional since it are the more socio-emotional types of

inducements that increase over time. Thomas & Anderson (1998) explain this difference by the specific research population used for their study. They argue that soldiers strongly identify with the Army and that this reflects a more relational attachment compared with MBA students working in more industrial settings with a focus on commercial benefits and thereby enhancing a more transactional attachment.

In this study there was no measure of the employee side of the psychological contract, so we have no information about the direction of changes in perceptions about employee contributions. Again, the use of single-item measures limits the reliability and validity of the results. Furthermore it is difficult to interpret these findings. For example it is possible that the increases in expectations are caused by the high expectations the army has towards the new recruits. Another explanation could be that recruits during these weeks have experienced that their employer actually offers them a lot with respect to these four inducements and that, as a consequence, they increase their expectations. These results ask for further validation in view of the specific research population (new recruits in the army), the operationalization of the psychological contract (mere expectations without reference to the promissory element), and the use of single-item measures.

In order to better understand the nature of changes in psychological contracts observed within both studies it is needed to take into account other factors and more data collection waves instead of simply comparing perceived promises at two or more data collection points. In the subsequent paragraph we discuss direct and indirect evidence for factors that could explain the changes occurring in newcomers' psychological contracts over time.

### 4.3.4. Empirical Information on the Principles Underlying Changes in Psychological Contracts

Although the available theories on psychological contract formation suggest many factors that could be investigated in relationship with psychological contract development, only few of them have received empirical attention. Here we successively discuss the following principles: *adaptation to reality* (section 4.3.4.1), *instrumentality* (section 4.3.4.2.), *reciprocity* (section 4.3.4.3), and *knowledge* (section 4.3.4.4).

#### *4.3.4.1. Adaptation to Reality*

According to Rousseau (1995) changes in promissory beliefs reflect a process of adaptation to reality. She states that newcomers generally start with an overly positive perception of their employment relationship and that this is reflected in initially high promissory beliefs about employer inducements and initially low promissory beliefs about their own contributions. This corresponds with the central thesis put forward within the *realistic expectations literature* (Dugoni & Ilgen, 1981; Irving & Meyer, 1994; Wanous *et al.*, 1992). As newcomers encounter more experiences within the organization they will adapt their expectations to reality. Based on this reasoning Rousseau (1995) argues that during the first months newcomers will decrease their perceptions of organizational promises and increase their perceived promises about their own contributions. Kotter (1973) and Schein (1978) also state that newcomers typically develop unrealistically high expectations and that this is likely to result in mismatches in individual expectations and what an organization can realistically provide.

Rousseau (1995) did not empirically verify her thesis, but the empirical information provided by the two studies on changes in the psychological contract we have discussed in the previous section are not in line with her propositions (Robinson *et al.*, 1994; Thomas & Anderson, 1998). Both studies suggest an increase in perceived employer inducements and in addition to this Robinson *et al.* (1994) also found a decrease in perceived employee contributions. At first sight these results are contrary to what would be expected based on realistic expectations theory. On the other hand, it is difficult to conclude this based on the available data, since it could be possible that within these two studies, the directions of changes effectively were in a more realistic direction. Further studies are therefore needed to assess the role of the adaptation principle.

If changes in perceived promises occurring during the socialization period do reflect an adaptation to reality, this would imply that *over time there will be an influence of the evaluation of promises and of actual experiences on subsequent changes in perceived promises*. It would imply (a) changes in perceived employer promises depending on inducements actually received or on the evaluation of employer promises and (b) changes in perceived employee promises depending on contributions actually made and on the evaluation of employee promises. However, we have found no studies that have explicitly assessed these relationships. Although they do not discuss this finding, the results obtained by Robinson *et al.* (1994) provide a first indication of the adaptation principle. Their results show that perceived violation of employer obligations at T2 was negatively related to the perception of employer obligations at T2 (Robinson *et al.*, 1994: 148, Table 5). Although this relationship is only significant for one type of obligation, namely job security, the other relations are in the same direction with the exception of merit pay. These findings need to be further explored in future research.

#### *4.3.4.2. Instrumentality*

Robinson *et al.* (1994) explain their findings that over time newcomers increase their perceptions of employer obligations and decrease their perceptions of employee obligations based on the principle of equity or instrumentality. These authors state that employees already consider it to be an important contribution that they continue working for their organization. Due to this contribution they will increase their perceived entitlements and they will decrease their perceived debts. This proposition is based on the principle of equity between contributions and rewards (Adams, 1965). This change pattern is also likely to occur because, due to self-serving biases, employees tend to overestimate their own contributions and to underestimate what they receive from others. In other words they will tend to believe that they owe their employer less but that their employer owes them more (Robinson *et al.*, 1994). However, it is difficult to make firm conclusions about the validity of this interpretation solely on the basis of this study. In order to assess if newcomers over time tend to overestimate their own contributions compared with the inducements received from their employer and the impact of this on changes in perceived promises it is needed to explicitly measure and relate these relationships using longitudinal research designs involving more data collections.

#### *4.3.4.3. Reciprocity*

According to the reciprocity principle (Blau, 1964) over time, due to the interplay of giving and receiving within the employment relationship, there will be an increase in reciprocal obligations (see also Chapter 2, section 2.4.2). According to Robinson *et al.* (1994) this is an indication of the development of a relationship based on trust. These authors only consider the positive spiral of inducements and contributions. However, we could also suppose the existence of a negative spiral, if both parties reciprocate in *not* fulfilling their promises, which would then contribute to the development of a more transactional, quid-pro-quo arrangement.

Basic to the norm of reciprocity is that one party's receipt of a benefit obligates him or her to return a payment. Continued receipt and payment over time is likely to create an increasing number and diversity of obligations between the parties to the exchange relationship (Blau, 1964; Homans, 1961). The reason for this escalation is that individuals strive to create imbalance in their exchange relationships to avoid becoming indebted to the other party (Blau, 1964). Moreover, obligations are expected to increase with the trust that develops with maturing relationships.

Departing from these theoretical propositions, Robinson *et al.* (1994) proposed that if the reciprocity principle underlies the changes in newcomers' psychological contract perceptions, this should be reflected in increasing perceptions of both employer and employee obligations over time. Based on the results of their study (4.3.3.1), they conclude that there is no evidence for the reciprocity principle since the increase in perceived employer obligations is not accompanied by an increase in perceived employee obligations. However, these authors have not empirically assessed the *relationship between perceptions of employer and employee obligations*. To make

more valid conclusions there is a need to investigate more explicitly if both types of perceptions are related over time.

It would also be useful to assess not only the relationship between perceptions of employer and employee obligations but also the relationship between evaluations and perceptions of obligations. Although they do not discuss their findings from this perspective, Robinson *et al.* (1994) empirically found a significant and negative relationship between perceived violation of employer obligations at T2 and perceptions of employee obligations at T2. This finding indicates that the reciprocity principle is operating: newcomers who make up a negative evaluation of what they receive from their employer, tend to decrease their perceptions of their own commitments towards the organization. In future research it would be interesting to more directly assess this interplay between evaluations and perceptions using more time points earlier after organizational entry, since in this study both variables were measured at the same data collection point, i.e. two years after entry.

Other, indirect evidence also suggests that the reciprocity principle does operate in explaining changes in psychological contracts. This evidence comes from (1) research on the relationship between newcomers' evaluations of employer obligations and outcome variables (Robinson & Morrison, 1995; Robinson, 1996), and (2) from research on employee reciprocity among more senior employees (Coyle-Shapiro & Kessler, 2000a; 2000b).

First, two studies indirectly suggest that newcomers' psychological contracts develop according to the reciprocity norm. (Robinson & Morrison, 1995; Robinson, 1996). These studies show that there is a *positive relationship between the evaluations newcomers make of the fulfillment of organizational promises and their subsequent attitudes and behaviors.* A positive evaluation increased newcomers' subsequent extra-role behaviors, performance, and intentions to stay and it decreased actual turnover. We have reviewed these studies in Chapter 2 when we described the relationship between the psychological contract and outcome variables (section 2.3). In these studies, employee contributions were not measured in terms of perceived employee promises and their evaluation, but only in terms of outcome variables. Based on these results we therefore cannot make conclusions about the interplay between employee and employer promises as part of the psychological contract. What they do show, however, is that *already during the first months of the employment relationship there is an important influence of the psychological contract – organizational promises and their fulfillment – on the engagements the employee is willing to take for the organization.* Another remark relates to the *time span* used in these studies (which also holds for the study conducted by Robinson *et al.*, 1994). Considering the fact that contemporary employment relationships tend to become of shorter duration, it is questionable whether the first 30 months (i.e. the period during which the psychological contract has been investigated by Robinson, 1996) is still representative for the initial stage of the employment relationship. Certainly when we consider their research population, namely MBA students. Therefore in subsequent research there is a need for investigating shorter periods after organizational entry, as it is done within the socialization literature.

Second, Coyle-Shapiro & Kessler (2000a; 2000b) have more explicitly assessed the reciprocity principle in psychological contract changes. Their research does not involve organizational newcomers but *more senior employees.* Therefore their results are not directly applicable to our research questions but indirectly they can provide us with relevant information about the role of reciprocity in newcomer psychological contract development. Their results generally suggest that *over time the fulfillment of organizational promises is positively related to employees' perceptions of their own obligations and to their contractual behavior.* The perception of organizational promises as such did not lead to an increased perception of employee promises. These authors conclude that what motivates reciprocity is not the perception of organizational promises as such, but the employee's actual experiences with respect to what the employer offers him or her with respect to these promises. Inversely, *the perception of actual employee contributions over time leads to an increased perception of organizational promises and to a decrease in the perception of actual inducements received from the*

*organization*. In other words, the fulfillment of employee promises increases employees' expectations towards their employer and it makes them more critical with respect to the evaluation of their employer's inducements.

#### *4.3.4.4. Knowledge*

In their study on changes in army recruits' psychological contracts, Thomas & Anderson (1998) have also investigated the role of socialization knowledge in psychological contract changes. As far as we are aware, these authors are the only ones who have empirically assessed this relationship. They proposed that knowledge gained during socialization affects the psychological contract. At a more general theoretical level Louis (1980) also stated that the process of psychological contract formation could be relevant in understanding the ways in which newcomers learn important organizational information. Thomas & Anderson (1998) have assessed *whether newcomers' psychological contract perceptions change as they become more knowledgeable about the terms of their employment relationship*. To empirically verify this relationship a socialization questionnaire was developed, comprised of 21 items measuring four components of socialization knowledge: (1) social integration, (2) role knowledge and mastery of skills, (3) interpersonal support (development of a network of sources for help), and (4) organizational knowledge (familiarity with the wider structural and cultural aspects of the organization. Socialization knowledge was measured at T1 and T2 (i.e. eight weeks after entry). Using stepwise hierarchical regression analyses, the authors found significant effects of two types of socialization knowledge on three of the four types of inducements for which changes over time had been observed. There was a significant effect of the increase in social knowledge on changes in expectations about job security and about family effects. An increase in role knowledge significantly affected changes in expectations about social/leisure aspects. Changes in expectations about accommodation were not significantly affected by socialization knowledge.

These results suggest that *knowledge obtained during the socialization period affects changes occurring in newcomers' psychological contract perceptions.* This finding is interesting in that it is the only empirical study that has explicitly used socialization measures to explain changes in newcomers' psychological contracts. However, it is difficult to theoretically explain the specific role of different types of socialization knowledge in changes in expectations. Thomas & Anderson (1998) only generally expected a relationship between socialization knowledge and psychological contract changes without providing more details about the specific relationships between certain types of knowledge and changes in certain types of psychological contract elements. They generally conclude that changes in newcomers' psychological contracts are influenced by a greater understanding of their environment and their place within it. More specifically, newcomers who have obtained social and role mastery, increase their expectations about organizational inducements.
Future research could further investigate whether these changes in the psychological contract are *due to a more general process of fitting in*, i.e. caused by what socialization researchers call the outcome of socialization, namely newcomer adjustment, or that these are caused by the *content of the information*, i.e. the type of knowledge obtained during socialization. The latter could be investigated by assessing newcomers' information-seeking behaviors about psychological contract dimensions or by assessing the knowledge they have about these dimensions and relating this to changes in their psychological contract perceptions.
Finally, the remarks we made about the sample and measures used within this study in section 4.3.3.2 also hold for the results about the role of socialization knowledge. We conclude that more research is needed to replicate and further clarify the observed relationships.

## 4.4. Integration of Theories on Newcomer Socialization and Psychological Contract Development

In this section we integrate the available theoretical and empirical information on newcomer psychological contract development with the information from socialization literature. There are several parallels that can be drawn between socialization theories and psychological contract development. These are summarized in Table 4.4. In the following sections we successively discuss the *outcomes* (section 4.4.1), the *central processes and*

*content* (section 4.4.2), the *role of time* (section 4.4.3), the *central actor* (section 4.4.4), and the *role of the organization* (section 4.4.5) in both newcomer socialization and psychological contract development.

Table 4.4: Comparison of Characteristics of Newcomer Socialization and Psychological Contract Development

| | | NEWCOMER SOCIALIZATION | PSYCHOLOGICAL CONTRACT DEVELOPMENT |
|---|---|---|---|
| **Outcomes** | Adaptation; Person-organization fit | Mastery within different role and knowledge domains; major focus on adaptation of the newcomer to the organization | Mutually shared perception of the employment relationship; focus on reciprocity and balance between the employer and employee side of the employment deal |
| **Central processes and content** | Learning processes; information acquisition | Learning the knowledge and behaviors needed to become integrated within the organization | Learning the terms of the employment relationship |
| **Role of time** | Longitudinality | Learning occurs over time through different socialization stages | Learning occurs over time through socialization stages but continues after the socialization period |
| **Central actor** | Employee | Employee – newcomer – as an active processor of information about socialization content areas | Employee as an active processor of information about employment deal |
| **Organization** | Role of agents and procedures | Enhances learning and adaptation through procedures and interaction with organizational agents | Enhances a mutually shared psychological contract through procedures and interaction with organizational agents |

### 4.4.1. Outcomes

Anderson & Ostroff (1997) consider a number of socialization outcomes for both the *organization* (e.g. addition of an effective performer, receipt of pro-social behavior, work role innovations, commitment to the organization) and the *individual* (e.g. sense of growth and self-esteem, job satisfaction, psychological well-being, challenge in a new work role). These types of outcomes are also central within the psychological contract literature. For both socialization processes and psychological contracts the ultimate goal is to *achieve newcomer adjustment*, i.e. a positive adaptation of the newcomer to the organization or a good person-organization fit. This, in turn, should contribute to the outcomes mentioned. While adjustment originally was conceptualized by socialization researchers in a more passive way, resulting from organizational socialization processes and tactics, more recently it is considered the result of an active process of newcomer sense making, and more specifically of newcomer information seeking (cf. Bauer *et al.*, 1998; Saks & Ashforth, 1997a). Other authors have described this adjustment process with a more explicit focus on the interaction between individual and organization (e.g. Reichers, 1987). More specifically within the Theory of Work Adjustment (Dawis & Lofquist, 1984) which we have presented in Chapter 2, it is presumed that the matching process between individual values and goals and organizational needs and objectives should result in *mutual* adjustment of both parties. This matching process can be considered as an exchange process and in this way it can be related to psychological contract development. Central to the psychological contract are the individual's promissory beliefs about employer inducements and employee contributions.

As Lance *et al.* (2000: 115) have noted, "*the psychological contract is one area of research concerned with newcomer adjustment*". These authors state that adjustment refers to employees reinterpreting and revising both the meaning of work in the organization and the view of themselves as members of the organization (Lance *et al.*, 2000; Vandenberg & Self, 1993). Relating this to the psychological contract, we could broaden this adjustment content to include changing perceptions of the terms of the employment relationship.

If the outcomes of socialization and psychological contract development are closely linked in that they both are related to the attainment of mutual adjustment, then it also becomes relevant to consider the processes that lead to this adjustment.

### 4.4.2. Central Processes and Content

A central proposition in socialization research is that the newcomer needs to obtain previously unknown information on a range of issues before becoming proficient in the new job role and organizational setting. In this sense, the socialization process is conceptualized as a *process of uncertainty reduction* that takes place by learning about the organization and how to function effectively within it (Ashford, 1986; Louis, 1980; Morrison, 1993a; 1993b; Ostroff & Koslowski, 1992; Reichers, 1987; Wanous & Colella, 1989). Socialization involves the development of a perceptual scheme that allows for the interpretation of organizational events in a manner which makes sense to the newcomer and coincides with the conventions by other members (Louis, 1980). In this respect, newcomer *information seeking and sense making* have received substantial attention as central processes within the socialization literature. Morrison (1993b) gives two reasons why information seeking is important for organizational newcomers. First, it reduces uncertainty and thereby enables newcomers to understand, predict, and control their environments. Second, it enables them to compensate for the fact that they are often not provided with the information they need to master their jobs and become integrated into their organizations (1993b: 558). These functions of information seeking come very close to the functions of the psychological contract as listed by Shore & Tetrick (1994: 93): *"Psychological contracts reduce uncertainty by establishing agreed-upon conditions of employment. That is, employees have a greater sense of security by believing that they have an understood agreement with their employer"*.

In their theories on psychological contract development, both Rousseau (1995) and Shore & Tetrick (1994) also propose that information seeking plays a central role. More generally the social-cognitive element is central to the conceptualization of the psychological contract, as we have explained in Chapter 2. However, within the psychological contract literature the role of information seeking has not been empirically investigated in relationship with the development of newcomers' psychological contracts during socialization.

In section 4.1.1 we have discussed the different content dimensions of socialization, which address the question of *what* is learned. In this respect Louis (1980) has explicitly listed *conveying and negotiating expectations* as one content area of socialization. Although this has not been further explicated or assessed by her or by other scholars in this field, it indicates the close relationship between socialization content and the psychological contract. While socialization is more focused on learning about the concrete aspects of the job and about the organizational norms and culture, the content of the psychological contract conceptualizes these aspects more in terms of an implicit, subjective perception of the employment deal with the organization. In this sense both are complementary. While research on socialization contents provides more insight into how newcomers become proficient in their new job and how they become integrated within the organization, the psychological contract addresses the more micro-level processes of individuals' perceptions and evaluations of their experiences. Relating the psychological contract to socialization, Thomas & Anderson (1998) propose that over time newcomers' improved understanding of what is expected of them and what is provided by or in the organization is reflected in their changing psychological contract perceptions. The study conducted by Thomas & Anderson (1998) provides interesting evidence that changes in newcomers' psychological contracts can be explained by the knowledge they obtain during the socialization period and suggests many paths to be further explored in future research. They conclude that the dynamic aspect of the psychological contract is especially prevalent during socialization since the accelerated learning occurring during socialization informs and influences newcomers' psychological contracts and is helpful in reducing uncertainty about the employment relationship.

Within the socialization literature information seeking is considered to enhance the central socialization outcome, i.e. newcomer adjustment (Miller & Jablin, 1991; Morrison, 1993b). This has been operationalized in terms of mastery of different types of outcomes. For example, information seeking about technical information is proposed to lead to task mastery, while information seeking about cultural norms should lead to acculturation. Applying this to the psychological contract, we could state that information seeking about different content dimensions of the psychological contract leads to a realistic understanding of the terms of the employment relationship and that over time this also contributes to newcomer adjustment.

### 4.4.3. Role of Time

Socialization occurs over time. It begins prior to entry during the recruitment and selection stages and it continues after organizational entry with socialization. This also holds for psychological contract development. As theoretically described by Thomas & Anderson (1998) and Nelson *et al.* (1991), newcomers enter the organization with a preliminary perception of their deal with the organization, called the "anticipatory psychological contract", which they further develop during the subsequent encounter stage and acquisition stage. While socialization is generally supposed to end after the first year of employment, and only restarts if employees change organizations or if they change jobs or departments within the organization (Van Maanen & Schein, 1979), psychological contract development is proposed to continue as long as the employment relationship endures. However, these changes in the psychological contract will become less prevalent after major adaptations have taken place during the socialization process (Rousseau, 1995). The central conception of socialization and psychological contracts as dynamic and evolving over time make that *longitudinality* is a central element in both groups of research. While socialization research is generally characterized by longitudinal studies, certainly over the past decade (Bauer *et al.*, 1998), as to date this is not the case within the psychological contract literature. This means that at this moment there is a discrepancy between the central conceptualization of psychological contracts as dynamic and the cross-sectional research designs used in most empirical studies.

### 4.4.4. Central Actor

The new employee is the central actor within the socialization process. From the traditional socialization approach this employee was considered mainly as a receiver of information from the organization, while more attention was paid to the role of the organization in adapting the newcomer to the organization. The shift towards describing newcomers as proactive during the socialization process has led to an increased attention for the role of the newcomer as the central actor in the socialization process. In Chapter 2 we have described that there is no general agreement upon the definition of the psychological contract. However, most researchers follow the definition proposed by Rousseau (1989), who situates the construct at the level of the individual, thereby making the individual employee the central actor within psychological contract research. Newcomer proactivity is also central to both models on psychological contract development we have discussed; both stress the role of information seeking (Rousseau, 1995; Shore & Tetrick, 1994), as we already discussed in section 4.4.2. A difference with socialization research, in which *new* employees are central, is that psychological contract research not only focuses on newcomers, but on employees in general. This relates to the proposition in psychological contract research that psychological contracts not only develop during the socialization period but that changes continue to occur as long as the employment relationship continues (Rousseau, 1995).
Within socialization literature the central attention to the individual employee is further examined by considering individual factors that could affect newcomer adaptation (Miller & Jablin, 1991). The same is true for psychological contract research, as we have extensively discussed in the previous chapter.

### 4.4.5. Role of the Organization

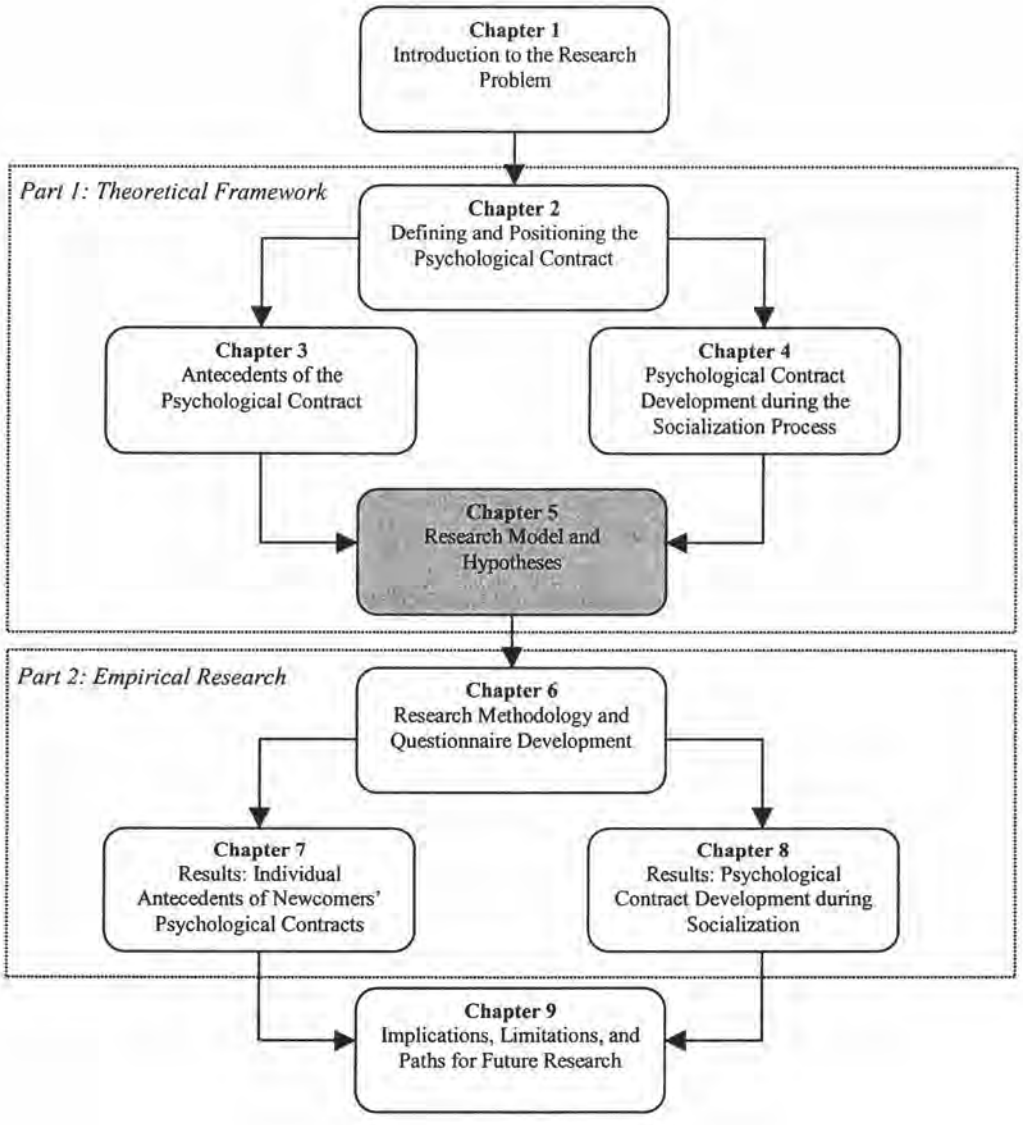
Traditionally socialization research has paid much attention to the influence of organizational socialization tactics and of organizational agents (mentor, supervisor) on newcomer socialization. Also within the conceptualization of newcomers as proactive information seekers, both organizational procedures and agents are considered to affect newcomer adaptation (Miller & Jablin, 1991). Organizational agents like supervisors, mentors or coworkers are considered as key sources of information that are relevant for the newcomer in learning his or her new role within the organization. Procedures like socialization activities also provide the newcomer with information relevant for enhancing newcomer adaptation. Within the psychological contract literature the theories and available empirical evidence also recognize the importance of organizational agents as well as human resources procedures and practices in affecting the psychological contract, as we have discussed in Chapter 3. In her definition of the psychological contract, Rousseau (1989; 1995) stressed that the organization provides the context within which the employee comes to understand the terms of his or her employment relationship. Both administrative and human contract makers are assumed to play an important role in this respect. In addition to the information provided in Chapter 2, the research on socialization tactics, for example the distinction between individualized versus institutionalized tactics (see section 4.1.4.2), could also be used to investigate the antecedents of the psychological contract.

## 4.5. Summary and Conclusions

In this chapter we have taken a process-oriented view on psychological contract development during the socialization process. In view of the fact that theoretical and empirical information on this theme is almost non-existent within the psychological contract literature, we departed from socialization literature and we applied the insights within this literature to psychological contracts. The comparison of socialization and psychological contract literature shows that both have much in common and that psychological contract development could be considered as one central aspect of the socialization processes taking place during organizational entry. The fact that socialization literature is a more long-standing research tradition makes it especially useful for improving our understanding of psychological contract development. In the subsequent chapter hypotheses are formulated that more specifically address the issue of psychological contract development during organizational socialization.

CHAPTER STRUCTURE

# Chapter 5
# Research Model and Hypotheses




*In this chapter we present our research model and our hypotheses based on the research questions we have formulated in the first chapter of this thesis. Following the structure of these research questions and of our theoretical discussion in the previous two chapters, we first formulate hypotheses relating to our first research question about the individual antecedents of the psychological contract (section 5.1). Subsequently, we present formulate hypotheses relating to our second research question, which addresses the development of the psychological contract during the socialization process (section 5.2).*

## 5.1. INDIVIDUAL ANTECEDENTS OF THE PSYCHOLOGICAL CONTRACT

Our first research question addresses the relationship between individual antecedents and newcomers' psychological contracts at organizational entry.

*RESEARCH QUESTION 1:*
***What is the relationship between newcomers' individual characteristics and the content and features of their psychological contracts at organizational entry?***

In Chapter 3 we have elaborated in more detail on four types of individual antecedents: (1) *work values*, (2) *career strategy*, (3) *locus of control*, and (4) *exchange orientation*. Based on our review of the literature on these constructs, we have formulated the following sub-questions:

*RQ1A: Is there a relationship between the type of* ***work values*** *newcomers attempt to attain during their careers and the content and features of their psychological contracts?*

*RQ1B: Is there a relationship between newcomers'* ***career strategy*** *and the content and features of their psychological contracts?*

*RQ1C: Is there a relationship between newcomers'* ***locus of control*** *and the content and features of their psychological contracts?*

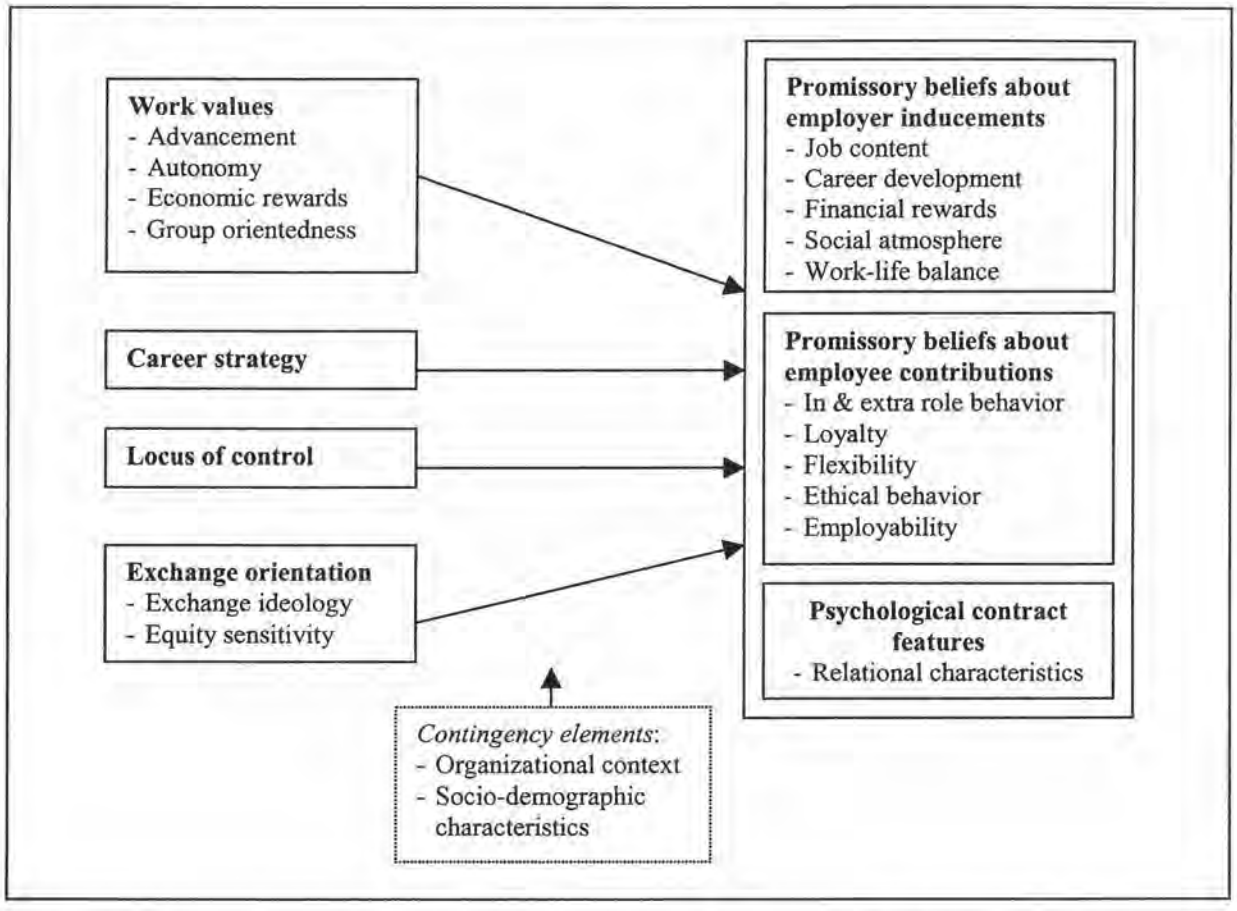
*RQ1D: Is there a relationship between newcomers'* ***exchange orientation*** *and the content and features of their psychological contracts?*

Building on the theoretical evidence about the psychological contract we have summarized in Chapter 2 and our description of individual antecedents in Chapter 3, we have formulated several hypotheses about the relationship between individual characteristics and newcomers' psychological contracts. Our research model is visualized in Figure 5.1. It shows the relationships between these four types of antecedents and the content and features of newcomers' psychological contracts.

The ***central outcome variables*** in this model are ***the content and features of newcomers' psychological contracts***. The ***content*** of the psychological contract refers to newcomers' promissory beliefs about the terms of their reciprocal exchange agreement with the organization. Based on our review of the conceptualization and operationalization of the psychological contract content in Chapter 2 we consider both parties to the contract – employer and employee – and we distinguish between multiple dimensions of employer inducements and employee contributions. The dimensions selected to assess newcomers' promissory beliefs about *employer inducements* are: (1) career development, (2) job content, (3) social atmosphere, (4) financial rewards, and (5) work-life balance. The dimensions selected to assess promissory beliefs about *employee contributions* are: (1) in & extra role behavior, (2) flexibility, (3) loyalty, (4) ethical behavior, and (5) employability. The selection of these dimensions is based upon our review of existing scales to measure the psychological contract content (e.g. Coyle-Shapiro & Kessler, 1998; Freese & Schalk, 1996; Herriot *et al.*, 1997; Rousseau, 1990). We elaborate in more detail on the procedures for scale development in Chapter 6. Considering the extensive process involved in item generation and testing and in assessing the reliability and validity of our scales (cf. section 6.5.5) we may assume that these dimensions are representative content dimensions of the psychological contract.
Based upon existing definitions and operationalizations (Freese *et al.*, 1999; Millward & Brewerton, 2000; Schalk & Freese, 1999), psychological contract ***features*** will be assessed using one global dimension expressing

the extent to which the global, underlying characteristics of the psychological contract are relational, as opposed to transactional, in nature.

Figure 5.1: Conceptual Model for the Individual Antecedents of Newcomer' Psychological Contracts




The ***individual antecedents*** included in our model are specified according to the four constructs discussed in Chapter 3 and they correspond with the central elements in our research questions: (1) *work values,* (2) *career strategy*, (3) *locus of control*, and (4) *exchange orientation.* For most of these antecedents our hypotheses address their relationship with the strength of perceived employer and employee promises in general. In this respect, we make no content-specific hypotheses about the different dimensions of employer inducements and employee contributions. With respect to work values we also formulate hypotheses about their relationship with specific content dimensions of employer promises.

The ***contingency elements*** we take into account are organizational context and socio-demographic characteristics of newcomers. In Chapter 6 we will describe the variables we have controlled for in our sample selection (organization, type of legal employment contract, educational level) or statistically in our analyses (gender, age, professional experience).

In the following sections we successively formulate our hypotheses about the impact of work values (section 5.1.1), career strategy (section 5.1.2), locus of control (section 5.1.3), and exchange orientation (section 5.1.4) on newcomers' psychological contracts.

### 5.1.1. Work Values

In chapter 3 (section 3.4.3) we have defined work values as the relatively stable goals that individuals try to reach through work and we have discussed the available evidence on the relationship between work values and work-related attitudes and behaviors. Based on this review it became clear that work values affect these outcomes mainly through their impact on how employees perceive their work environment (James & James, 1989; London, 1983; Ravlin & Meglino, 1987; Van den Brande, 2002). Relating these insights to the psychological contract, *we propose that newcomers will differ in the promissory beliefs that are part of their psychological contract depending on the type of work values they want to attain throughout their work life.* Apart from the recent study conducted by Van den Brande (2002), who found significant relationships between employees' career anchors and their psychological contract perceptions, few direct evidence exists to support this hypothesis. Therefore we base our arguments mainly on the conceptualizations of work values provided by researchers in this field. We further specify our general proposition by focusing on *four basic types of work values* individuals can attempt to attain during their career. Based upon the categorization of values proposed by Super (1957), which has been further developed by the MOW International Research Team (Sverko & Super, 1995; Super, 1995) (cf. section 3.4.3.1), we successively formulate hypotheses about the impact of: (1) *Advancement,* (2) *Autonomy,* (3) *Economic rewards,* and (4) *Group orientedness.*

#### *5.1.1.1. Advancement*

People who attempt to attain advancement in their work and their career attach much importance to achievement, making progress, development and power (London, 1983; Schein, 1993). In return they are willing to work hard, seek opportunities to learn new skills, take on additional responsibilities at work and sacrifice personal gratification for work-related objectives. Studies on this value type have shown that in order to motivate employees who value advancement, organizational inducements like career development programs and established career paths are important (London, 1983; Schein, 1993). On the other hand, these employees also have a strong feeling of personal responsibility for their career development. For example, Ravlin & Meglino (1987) found that employees for whom advancement is important, actively seek for advancement opportunities by requesting to be considered for promotion or by volunteering for important assignments.
Recently, Van den Brande (2002) found that the career anchor "managerial competence", which also includes values relating to advancement, is one of the career anchors that is most predictive of psychological contract perceptions. It predicted employees' expectations about inducements relating to a long-term relationship and it was positively related to employees' perceptions of their obligations with respect to flexibility, loyalty and personal investment in the organization.
Based on this evidence we expect advancement to be related to newcomers' promissory beliefs about their psychological contract. More specifically we expect a significant relationship between advancement and those content dimensions of employer inducements that refer to intrinsic job and career aspects. We also expect advancement to be positively related to newcomers' promissory beliefs about their contributions to the organization.

***Hypothesis 1A:*** *The more newcomers attempt to attain advancement in their work, the stronger their promissory beliefs about employer inducements in general and more specifically relating to their job content and career development opportunities.*

***Hypothesis 1B:*** *The more newcomers attempt to attain advancement in their work, the stronger their promissory beliefs about employee contributions.*

The findings obtained by Van den Brande (2002) suggest that psychological contract perceptions of employees scoring high on the career anchor "managerial competence" tend to be more relational in nature. We expect that this will also hold for newcomers entering the organization. We therefore propose that the psychological contract of newcomers for whom advancement is important will be more relational than the psychological contract of newcomers who attach less importance to making advancement.

***Hypothesis 1C**: Advancement will be positively related to relational psychological contract features.*

#### *5.1.1.2. Autonomy*

According to Schein (1978; 1993) individuals who value autonomy consider a certain degree of freedom to organize their life and work as they want as important. They often have compromised themselves less towards the organization and they tend to seek for work situations in which they can be maximally free of organizational constraints to pursue their professional or technical competence (Schein, 1978; 1993). As a result, they generally expect less of the organization than others would do.

In her study, Van den Brande (2002) found that the career anchor "autonomy" negatively affected employees' perceptions of obligations regarding the personal investments they should make for their organization. Autonomy was negatively related to expectations about a long-term relationship with the organization but was positively related to expectations about inducements regarding tangibility and carefulness of arrangements.

Based upon this evidence we propose that autonomy will be negatively related to newcomers' promissory beliefs about employee contributions and to relational psychological contract features. With respect to employer inducements, we expect a negative impact of autonomy on promissory beliefs about those types of inducements that express a more long-term relationship with the organization (career development dimension) or that could restrict individuals' autonomy at work (social atmosphere dimension). For inducements relating to work-life balance, we expect a positive relationship since autonomy has been shown to be related to the importance employees attach to having a good balance between their work and private life (Schein, 1993). We also expect a positive relationship with job content, since autonomy is also a work-intrinsic value (Ravlin & Meglino, 1987).

***Hypothesis 2A**: The more newcomers attempt to attain autonomy in their work, the weaker their promissory beliefs about employer inducements relating to career development and social atmosphere.*

***Hypothesis 2B**: The more newcomers attempt to attain autonomy in their work, the stronger their promissory beliefs about employer inducements relating to job content and work-life balance.*

***Hypothesis 2C**: The more newcomers attempt to attain autonomy in their work, the weaker their promissory beliefs about employee contributions.*

***Hypothesis 2D**: Autonomy will be negatively related to relational psychological contract features.*

Taken together this means that at organizational entry newcomers who value autonomy will have stronger initial promissory beliefs about their job content and work-life balance but weaker initial promissory beliefs about career development or social atmosphere. They also will have weaker initial promissory beliefs about their own contributions and their psychological contracts will generally be less relational.

#### *5.1.1.3. Economic Rewards*

According to Locke & Taylor (1990), individuals who value economic rewards tend to base their self-concept on material outcomes like the amount of money they earn. As a result they often attempt to raise their expectations of what they are entitled to receive from the organization in terms of economic security and rewards. A financially-driven career motivation affects employees to search for work situations in which they perceive opportunities for financial rewards. According to London (1983), employees for whom economic rewards are important will strive more actively for money in their work, by requesting pay raises or by changing jobs for a higher paying position. Because this type of value addresses the material aspects of the employment deal, we propose that this value will significantly affect individuals' beliefs about the financial inducements they can expect of their organization. In view of the limited evidence available on the relationship between this value and employees' perceptions of their employment relationship we formulate no further hypotheses on the relationship between economic rewards and the content or features of newcomers' psychological contracts.

***Hypothesis 3:*** *The more newcomers attempt to attain economic rewards in their work, the stronger their promissory beliefs about employer inducements relating to the provision of financial rewards.*

#### *5.1.1.4. Group Orientedness*

The fourth category refers to values that are not of a material nature like rewards, but which are more centered around relations with other people at work, like peers, supervisors, other colleagues or customers. In this sense Elizur *et al.* (1991) call this type of values affective instead of cognitive (Elizur *et al.*, 1991). Individuals who look for social values within their work situation have been found to invest more in creating a social network at work and tend to behave in a more altruistic way towards other employees (Locke & Taylor, 1990; Ravlin & Meglino, 1987). Because this value is strongly directed towards the social aspects of the employment deal we expect that newcomers who attach more importance to group orientedness will have stronger promissory beliefs about organizational inducements relating to the social atmosphere at work. We also expect them to have stronger promissory beliefs about their own contributions to the organization, considering the evidence on the relationship between social values and pro-social behavior at work (Locke & Taylor, 1990; Ravlin & Meglino, 1987). Based upon that information we also expect a positive relationship between group orientedness and relational psychological contract features.

***Hypothesis 4A:*** *The more newcomers attempt to attain group orientedness in their work, the stronger their promissory beliefs about employer inducements relating to social atmosphere.*

***Hypothesis 4B:*** *The more newcomers attempt to attain group orientedness in their work, the stronger their promissory beliefs about employee contributions.*

***Hypothesis 4C:*** *Group orientedness will be positively related to relational psychological contract features.*

### 5.1.2. Career Strategy

In Chapter 3 we have discussed several concepts to describe the different career strategies that individuals can follow to obtain their work values: careerism (Rousseau, 1990), career concept (Driver, 1994), cosmopolitan versus local orientation (Gouldner, 1957), and career commitment (Blau, 1989). In general, these concepts address the differences between individuals who try to attain their career goals by developing their career within one organization (described as low careerists, 'company men', or employees with a steady state career concept) and, on the other extreme, individuals who try to attain their goals by changing employers frequently during their careers (described as high careerists, cosmopolitans, or employees with a transitory career concept). These different career strategies reflect different preferences regarding the time frame and the scope of the employment relationships employees want to engage in (Deiver, 1994; Sparrow, 1996). There is empirical evidence that these preferences affect employees' attitudes towards their organization as well as their behaviors. For example, employees with a more local career strategy are found to show higher levels of commitment to the organization and they are less likely to leave the organization (Herriot *et al.*, 1996; Sparrow, 1996). They are also proposed to be more flexible regarding expectations and to value the employment relationship as such, in contrast with high careerists or cosmopolitans who take on a more instrumental stand towards their relationship (Larwood *et al.*, 1998).

Career strategy is relevant to study as an individual antecedent of the psychological contract because it involves perceptions that employees have towards their employment relationship (Larwood *et al.*, 1998; Rousseau, 1990). Within the psychological contract literature there is empirical evidence that employees with a more local career strategy have different promissory beliefs at organizational entry than those with a more cosmopolitan career strategy. More specifically, Rousseau (1990) found a positive correlation between careerism and beliefs about transactional inducements and contributions, and a negative correlation between careerism and beliefs about relational inducements and contributions. Departing from this evidence, and from the more general literature on career strategies, we expect to find a significant impact of newcomers' preferred career strategy on both the

features and content of their psychological contracts at organizational entry. We propose that newcomers with a more local career orientation (low careerists) will have stronger promissory beliefs about the inducements they can expect from their employer as well as about the contributions they should make to their employer. We also expect their psychological contract to have more relational features.

***Hypothesis 5A:*** *The more newcomers attempt to follow a local career strategy, the stronger their promissory beliefs about employer inducements.*

***Hypothesis 5B:*** *The more newcomers attempt to follow a local career strategy, the stronger their promissory beliefs about employee contributions.*

***Hypothesis 5C:*** *A local career strategy will be positively related to relational psychological contract features.*

### 5.1.3. Locus of Control

Locus of control (LOC) refers to individuals' beliefs that they have personal responsibility for what happens to them (Krem, 1992; Rotter, 1996). Relating this to the work context, LOC refers to employees' beliefs about personal control over what happens to them in their work, for example with respect to salary increases or promotions (Furnham & Steele, 1993; Spector, 1982). In Chapter 3 we have reviewed evidence for the relationship between LOC in work settings and employee attitudes and behaviors like job satisfaction, commitment, and performance (e.g. Blau, 1993; Coleman *et al.*, 1999; Furnham *et al.*, 1994; Hoff Macan *et al.*, 1996; Judge & Bono, 2001).

Within the psychological contract literature there is no empirical evidence available on the relationship between LOC and psychological contract perceptions or evaluations based on which we can formulate our hypotheses. Within the LOC literature there is some evidence that employees' reactions to organizational inducements are affected by LOC but these studies did not assess the direct relationship between LOC and the perceptions of these inducements (Beehr *et al.*, 1980; Lam & Schaubroeck, 2000). Because employees with a strong internal LOC tend to consider the reinforcements they receive as being due to their own efforts, we propose that they will also be more likely to expect inducements from their organization because they will feel "in control" over the attainment of these inducements. Therefore we expect that promises about inducements will be more salient to newcomers scoring high on internal LOC compared to newcomers scoring low on internal LOC. With respect to promissory beliefs about their own contributions, Rousseau (2001b) recently proposed that employees will be more likely to make promises when they feel a sense of control over the situation. Moreover, LOC theory suggests that internals perceive stronger performance-rewards contingencies (Goldsmith *et al.*, 2000; Skinner, 1996; Spector, 1982), which implies that internals might perceive their own contributions as more instrumental for obtaining results (inducements) from the organization. Therefore we propose that newcomers scoring high on internal LOC will be more likely to believe that they have made promises about their contributions than newcomers scoring low on internal LOC. We also expect a positive relationship between internal LOC and relational psychological contract features because these features are characteristic for an employment relationship that involves more intense commitments from both parties (employer and employee).

***Hypothesis 6A:*** *The higher the level of internal LOC, the higher the level of promissory beliefs about employer inducements.*

***Hypothesis 6B:*** *The higher the level of internal LOC, the higher the level of perceived promises about employee contributions.*

***Hypothesis 6C:*** *Internal LOC will be positively related to relational psychological contract features.*

### 5.1.4. Exchange Orientation

As we have outlined in Chapter 3, both exchange ideology and equity sensitivity are individual dispositions that capture individual differences in the centrality of the reciprocity norm in exchange relationships (e.g. Eisenberger *et al.*, 1986; Huseman *et al.*, 1987). Research using these constructs shows that both are moderators of the relationship between organizational experiences and employees' attitudes and behaviors. More specifically, for employees scoring high on exchange ideology or who are more sensitive to equity or over-reward, stronger contingencies between organizational inducements and outcomes have been found (e.g. Eisenberger *et al.*, 1986; 2001; King & Miles, 1994; O'Neill & Mone, 1998; Witt & Wilson, 1992). In addition equity sensitivity also directly affects employee behaviors in the workplace. Studies have shown that more benevolent employees perform better and that they engage in more organizational citizenship behaviors than employees categorized as equity-sensitive or entitled (Bing & Burroughs, 2001; Blakely *et al.*, 2001).

Based upon this evidence, Coyle-Shapiro & Kessler (1998; 2000a) have assessed whether ***exchange ideology*** is a useful construct for explaining employees' psychological contract perceptions and behaviors. These authors found that exchange ideology negatively affected employees' perceptions of the contributions they should make to their organization as well as their reports of the contributions they actually made. Exchange ideology also moderated the impact of inducements received from the organization on employees' perceived obligations as well as their contract behaviors. These studies were conducted using samples of more senior employees but based on these findings we expect that exchange ideology will also negatively affect newcomers' initial promissory beliefs about the contributions they should make to the organization. Coyle-Shapiro & Kessler (1998; 2000a) did not assess the direct relationship between exchange ideology and employees' perceptions of employer obligations but the correlational analyses reported in their second study show a significantly positive correlation between both variables (Coyle-Shapiro & Kessler, 2000a). Also considering the observation that the contributions of employees with a high level of exchange ideology are more contingent upon what they receive from the organization than the contributions of employees with a low level of exchange ideology, we expect that the former will also pay more attention to what their organization promises them, making these promises more salient. Therefore we expect that exchange ideology will positively affect newcomers' promissory beliefs about employer inducements. Because employees scoring high on exchange ideology are more focused on exchange norms in relationships rather than on communal norms (Blader & Tyler, 2000) we propose that exchange ideology will be negatively associated with relational psychological contract features since these express more intangible commitments without clear effort – reward contingencies.

***Hypothesis 7A:*** *The higher the level of exchange ideology, the higher the level of promissory beliefs about employer inducements.*

***Hypothesis 7B:*** *The higher the level of exchange ideology, the lower the level of promissory beliefs about employee contributions.*

***Hypothesis 7C:*** *The level of exchange ideology will be negatively related to relational psychological contract features.*

No direct evidence is available concerning the relationship between ***equity sensitivity*** and psychological contract perceptions. However, since exchange ideology and equity sensitivity have been found to be negatively related (King & Miles, 1994; King *et al.*, 1993), we expect that equity sensitivity will also be predictive of newcomers' initial promissory beliefs. Empirical evidence suggests that equity sensitivity is related to preferences for different types of inducements. More specifically, benevolent employees have been found to prefer less tangible outcomes like feelings of accomplishment and recognition instead of more material rewards like pay (Milles *et al.*, 1994). On the other hand benevolent employees are proposed to prefer situations of under-reward, which would imply that they generally have lower expectations towards organizational inducements. Therefore we formulate no specific hypothesis about the relationship between equity sensitivity and promissory beliefs about employer inducements. Based on the findings about the relationship between equity sensitivity and employee

performance and organizational citizenship behavior (Bing & Burroughs, 2001; Blakely *et al.*, 2001) we expect that more benevolent newcomers will tend to make more promises about their contributions to the organization. We also expect that the degree of benevolence will be positively associated with relational psychological contract features because employees scoring high on benevolence are more focused on communal relationship norms (Blader & Tyler, 2000). We propose that this will also be reflected in perceptions of their employment relationship that can be characterized as more relational.

***Hypothesis 8A:*** *The higher the level of benevolence, the higher the level of promissory beliefs about employee contributions.*

***Hypothesis 8B:*** *The level of benevolence will be positively related to relational psychological contract features.*

### 5.2. PSYCHOLOGICAL CONTRACT DEVELOPMENT DURING THE SOCIALIZATION PROCESS

*RESEARCH QUESTION 2:*
***How does the psychological contract of newcomers develop during the socialization process?***

Our second research question addresses the dynamic nature of the psychological contract. More specifically, we investigate newcomer psychological contract development during the socialization process. Psychological contract literature has not explicitly addressed this issue as to date. Therefore we will investigate this research question in a more explorative way, guided by both the psychological contract literature (summarized in Chapter 2) and the socialization literature (summarized in Chapter 4). Three major sub-questions are distinguished that correspond with three possible aims of longitudinal research (van der Kamp & Bijleveld, 1998).

1. The first question relates to the ***description*** *of the change process*: how do newcomers' psychological contract perceptions, evaluations and information-seeking behaviors change during the course of the employment relationship? What are the magnitude and the patterns of intraindividual changes that can be discerned and are there interindividual differences in these intraindividual changes? These questions address change in the psychological contract as a function of time.
2. The second question relates to the ***explanation*** *of the change process*: what is the relationship between changes in psychological contract perceptions and antecedent variables? This question addresses the interaction between changes in the psychological contract as a function of time and changes as a function of time-invariant or time-varying antecedent variables.
3. The third question relates to the ***prediction of outcomes*** *of the change process*: are changes in the psychological contract occurring during the socialization process related to newcomer adaptation?

In this thesis we focus our attention on answering the following three sub-questions:

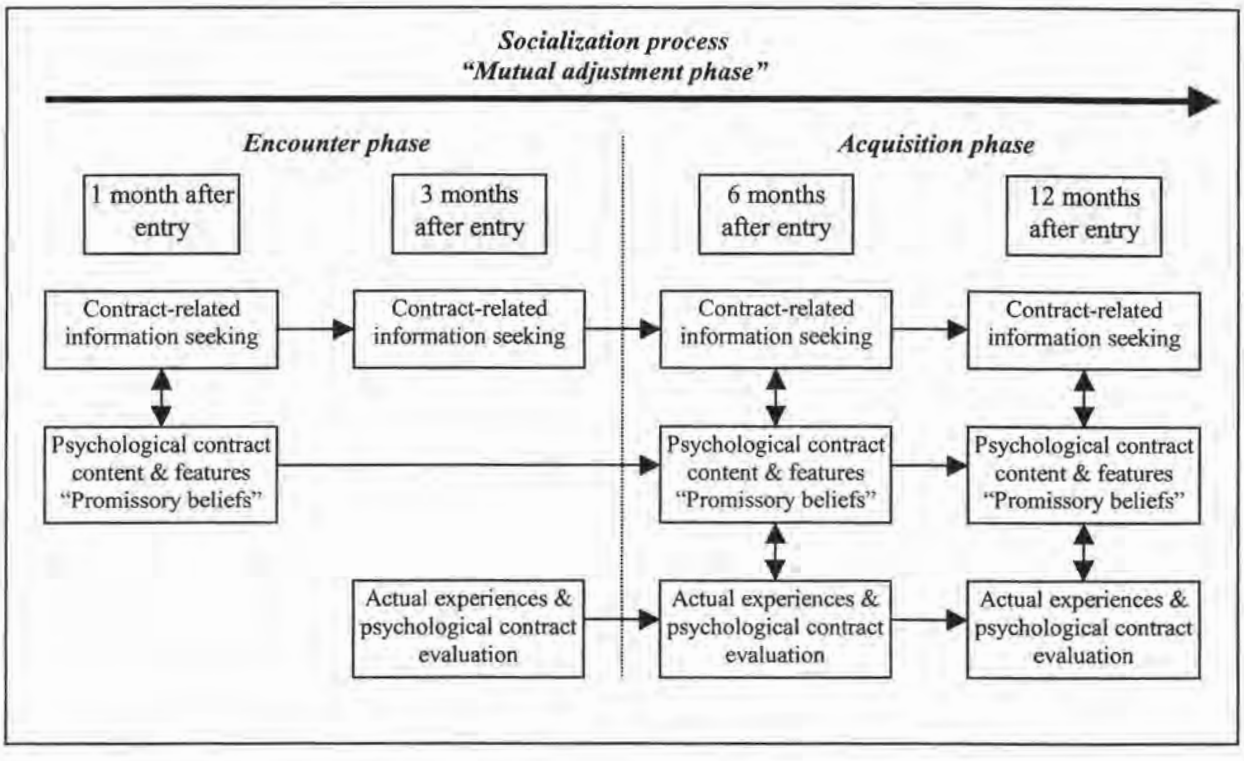
RQ2A: What are the changes in newcomers' psychological contracts occurring over time during socialization?

RQ2B: What is the relationship between newcomers' psychological contract evaluations and changes in their promissory beliefs during the socialization process?

RQ2C: What is the relationship between newcomers' information-seeking behaviors about the psychological contract and their psychological contract perceptions and evaluations over time?

The global psychological contract change trajectory that we will examine is represented in Figure 5.2. We will further elaborate on this model in our discussion of hypotheses with respect to the three sub-questions on psychological contract development.

Figure 5.2: Conceptualization of Psychological Contract Development During the Socialization Process




The ***central variables*** included in our longitudinal analyses are the following: (1) *promissory beliefs* about employer inducements and employee contributions, (2) *actual experiences* (inducements received and contributions made), (3) *evaluation of promise fulfillment*, and (4) *contract-related information seeking*. These are all studied as time-varying variables. We examine them by taking into account both parties to the contract (employer and employee) and by considering *multiple content dimensions* of employer inducements and employee contributions, as we have presented these in section 5.1. We will not formulate content-specific hypotheses but in our analyses we will assess the differences and similarities between change trajectories and causal relationships for each of the content dimensions.

In Chapter 2 we have reviewed differences in the operationalizations of the evaluative facet of the psychological contract. Based upon previous research (e.g. Conway, 1999; Coyle-Shapiro & Kessler, 2000b; 2000c; Ho, 1999) we have included two measures of psychological contract evaluation, namely employees' actual experiences (their perceptions of the inducements they have received from their employer and of the contributions they have made) and their evaluations of promise fulfillment. Both will be further discussed in Chapter 6. In addition, with respect to research question 2C, we use two time-invariant outcome variables measured at one year after entry, i.e. met expectations and satisfaction.

### 5.2.1. Changes in the Psychological Contract as a function of Time

Before examining structural questions about the antecedents and outcomes of newcomer psychological contract development it is necessary to address the more basic question concerning the nature of the change trajectory of the psychological contract over time (Chan, 1998; van der Kamp & Bijleveld, 1998). Question 2A addresses the nature of the change trajectory of (1) promissory beliefs, (2) actual experiences, (3) evaluation of promise

fulfillment, and (4) information seeking. In the subsequent sections we present our hypotheses with respect to these change trajectories.

#### *5.2.1.1. Changes in Promissory Beliefs*

In Chapter 4 we have discussed several theoretical grounds for assuming that the psychological contract will change during the socialization period. Departing from social-cognitive theories, theoretical models on psychological contract development (cf. section 4.3.1) build on the central proposition that newcomers enter the employment relationship with only a rudimentary psychological contract schema, which is further elaborated and adapted after entry (Rousseau, 1995; Shore & Tetrick, 1994). These changes are not limited to the socialization period but they are most prevalent during that period because of the newness of the situation and the fact that, in order to reduce uncertainty, newcomers will use more active and controlled information-seeking strategies during the first months after entry. Changes in psychological contract perceptions during socialization are also assumed by Anderson & Thomas (1996) and Nelson *et al.* (1991), who have related psychological contract development to socialization stages (cf. section 4.3.2).

In Chapter 4 we have discussed the adaptation principle as one of the mechanisms underlying changes in psychological contracts (Rousseau, 1995). As outlined in section 4.3.4.1, Rousseau (1995) departs from the literature on realistic expectations (Dugoni & Ilgen, 1981; Irving & Meyer, 1994; Wanous *et al.*, 1992) and assumes that changes in promissory beliefs during socialization involve a decrease in perceived promises about employer inducements and an increase in perceived promises about employee contributions. However, this assumption has not received empirical support from the two studies on changes in newcomers' psychological contracts that have been conducted as to date (section 4.3.3). Both Robinson *et al.* (1994) and Thomas & Anderson (1998) observed an increase in newcomers' expectations towards their employer and, also in contrast with Rousseau's (1995) prediction, Robinson *et al.* (1994) found a decrease in perceived employee obligations. Robinson *et al.* (1994) interpret their findings in terms of instrumentality and conclude that over time newcomers expect more of their employer, while at the same time decreasing their perceptions of their own obligations.

In view of the mixed evidence on the direction of changes in perceived promises, we formulate *two alternative hypotheses about the direction of change* in newcomers' promissory beliefs about employer inducements and two alternative hypotheses about the direction of change in their promissory beliefs about employee contributions.

***Hypothesis 1:*** ***During the socialization process there will be changes in newcomers' promissory beliefs about employer inducements.***
***Hypothesis 1A:*** *Over time newcomers' perceptions of employer promises will increase.*
***Hypothesis 1B:*** *Over time newcomers' perceptions or employer promises will decrease.*

***Hypothesis 2:*** ***During the socialization process there will be changes in newcomers' promissory beliefs about employee contributions.***
***Hypothesis 2A:*** *Over time newcomers' perceptions of employee promises will decrease.*
***Hypothesis 2B:*** *Over time newcomers' perceptions of employee promises will increase.*

#### *5.2.1.2. Actual Experiences and Evaluations of Promises*

While only two studies have been conducted on changes in newcomers' perceived promises, no empirical evidence is available on changes in newcomers' actual experiences or in their evaluations of promise fulfillment during socialization.

At the theoretical level, Rousseau (1995) proposes that with increasing experience in the organization, there will be an increased probability of contract breach. The reason for this is that over time the perceived promises comprising an employee's psychological contract become more stable and newcomers will tend to view events in preconceived ways, thereby leaving a lot of external changes unnoticed or ignored. Thus, they will become less likely to adapt their promissory beliefs as a function of the experiences that they encounter within the organization. This may increase the likelihood of a perception of psychological contract breach over time (Rousseau, 1995).

With respect to changes in newcomers' evaluations of their own contributions, Robinson *et al.* (1994) propose that these will increase over time. They argue that employees will consider the fact that they are still staying with the organization already as an important contribution. Moreover, perceptual biases like overly positive self-evaluations and underestimation of other parties' contributions will make that employees will be more positive about the evaluation of their own contributions than about the evaluation of their employer's inducements (Robinson *et al.*, 1994).

Putting this theoretical evidence together, this implies that over time newcomers will tend to believe that they are contributing more to the organization while they will believe that they are receiving less from the organization.

***Hypothesis 3:*** ***During the socialization period newcomers will become more negative about the inducements they receive from their employer.***
***Hypothesis 3A:*** *Over time newcomers' perceptions of employer inducements received will decrease.*
***Hypothesis 3B:*** *Over time newcomers' perceptions of promise fulfillment by their employer will decrease.*

***Hypothesis 4:*** ***During the socialization period newcomers will become more positive about the contributions they make to the organization.***
***Hypothesis 4A:*** *Over time newcomers' perceptions of contributions made to the organization will increase.*
***Hypothesis 4B:*** *Over time newcomers' perceptions of the fulfillment of their promises will increase.*

#### *5.2.1.3. Contract-Related Information Seeking*

At the theoretical level, Rousseau (1995) and Shore & Tetrick (1994) propose that during the first months of the employment relationship newcomers explicitly seek out information regarding what they have to contribute and what they can expect to receive from the organization in return. Once these basic terms are established within the psychological contract schema, information processing becomes more automatic, implying that the frequency of information seeking will decrease. Thus, based on their propositions we would expect to observe decreases in contract-related information seeking over the course of the socialization period.
Because there is no empirical evidence available in the psychological contract literature to base our hypotheses on, we further rely upon the information provided by studies within the socialization literature (cf. Chapter 4). Within the socialization literature researchers also argue that the overall frequency of newcomer information seeking decreases over time, because the social costs of information seeking increase with tenure (Bauer *et al.*, 1998; Morrison, 1993b). According to Ashford (1986), continuing to seek information undermines the standing of the newcomer as confident and self-assured. Both Ostroff & Kozlowski (1992) and Morrison (1993b) empirically observed that changes in information seeking depended on the type of information sought. They found that during the first months of employment newcomers decreased their search for information needed to become integrated within the organization while they increased information seeking about referent information and performance evaluations. Since psychological contract information is more related to the former type, i.e. obtaining a better understanding of the terms of the employment relationship, we expect psychological contract-related information seeking to decrease over time.

***Hypothesis 5:*** ***During the socialization period the frequency of psychological contract-related information seeking will decrease.***

***Hypothesis 5A:*** *Over time the frequency of newcomers' information-seeking behaviors about the inducements they can expect of their employer will decrease.*

***Hypothesis 5B:*** *Over time the frequency of newcomers' information-seeking behaviors about the contributions their employer expects of them will decrease.*

#### *5.2.1.4. Socialization Stages and the Form of Change Trajectories*

Our study focuses on the socialization period, which is generally defined as the first year of newcomers' employment in their new organization (Bauer *et al*, 1998; Fisher, 1986). As shown in Figure 5.2, within this period two stages are discerned – encounter and acquisition – which we have also discussed in Chapter 4. Longitudinal research on socialization has shown that changes in newcomer adjustment and other socialization-relevant variables such as information seeking occur most rapidly during the first months after organizational entry, i.e. during the encounter stage, while reaching relative stability as early as four to six months after entry (Ashforth & Saks, 1996; Morrison, 1993a; 1993b). Based on her study, Morrison (1993a; 1993b) concludes that early levels of socialization are highly important in determining later socialization. According to Thomas & Anderson (1998) such primacy effects of the early period of socialization also apply to newcomers' psychological contracts.

Existing longitudinal studies within the socialization and psychological contract literature have focused on different time periods making it difficult to predict the specific form of change in psychological contract perceptions, evaluations and information seeking over the first year of employment. For example, Chan & Schmitt (2000) found evidence for linear changes in information seeking and in adaptation outcomes but the time span they used only covers the first four months of employment. We do not know if this linear form of the change trajectory continues after four months or instead that the change becomes curvilinear in form. Within the psychological contract literature longitudinal studies only employed two data collections making it impossible to formulate propositions about the functional form of change over more time periods (Robinson *et al.*, 1994; Thomas & Anderson, 1998).

Therefore, based on the theories on socialization stages we generally expect that the changes occurring in the psychological contract variables included in our study will not occur in a linear way during the whole socialization process. As Rousseau (1995) points out, once individuals have an established schema about their employment relationship they will tend to see what they expect to see and they will only gather additional information when they think it is needed (e.g. due to external events like change of supervisor or promotion). This would imply that changes in promissory beliefs are more apparent during the encounter stage than during the acquisition stage, while changes in the perception of actual experiences and the evaluation of promises might become more apparent during the acquisition phase.

### 5.2.2. Relationship between Evaluations of Actual Experiences and Changes in Promissory Beliefs

Question 2B addresses possible explanations for changes occurring in newcomers' promissory beliefs over time. This question builds on the question originally formulated by Louis (1980): *How do newcomers cope with the experiences they encounter during organizational entry? How do they come to understand, interpret, and respond in and to unfamiliar organizational settings?* (1980: 229). According to Robinson *et al.* (1994) the actual behaviors of both parties (employee and organization) will affect newcomers' psychological contract perceptions. The evaluations newcomers make of their own behaviors and the behaviors of organizational agents will affect their perception of what they owe their organization and vice versa.

First, we formulate hypotheses about the relationship between employees' evaluations of inducements and changes in their promissory beliefs about these inducements and about the relationship between their evaluations of their own contributions and changes their promissory beliefs about their own contributions, i.e. the role of the *adaptation principle* (section 5.2.2.1). Second, we formulate hypotheses with respect to the interplay between the evaluation of inducements and subsequent changes in promissory beliefs about contributions and to the interplay between the evaluation of contributions and subsequent changes in promissory beliefs about inducements, i.e. the role of the *reciprocity principle* (section 5.2.2.2).

#### *5.2.2.1. Adapting Promissory Beliefs to Actual Experiences and Evaluations of Promises*

The adaptation principle has been proposed as one of the mechanisms underlying changes in psychological contracts (Rousseau, 1995). As we already indicated in section 5.2.1.1, Rousseau (1995) proposes that adaptation of promissory beliefs to reality involves a decrease in perceived promises about employer inducements and an increase in perceived promises about employee contributions. In Chapter 4 we have argued that if changes in promissory beliefs reflect an adaptation to reality (as proposed by Rousseau, 1995), this would imply that changes in promissory beliefs are affected by newcomers' evaluations of the inducements or contributions being the subject of these beliefs. This assumption thus builds on the conception of employees as adaptive organisms who adapt their attitudes, behaviors and beliefs to their social context and to the reality of their own past and present behavior and situation (Sonnenfeld & Pfeffer, 1978). Salancik & Pfeffer (1978) use the term "enactment process" to describe how employees' past behaviors influence the ways in which they perceive and interpret their environment through retrospective interpretation processes.

Applying this to our research questions, it implies that the changes occurring in newcomers' promissory beliefs, would be affected by their intermediate evaluations of the terms of their employment relationship. More specifically, it means that newcomers who encounter that they receive less than promised will decrease their perceptions of what their employer has promised them, while newcomers who experience to receive more than promised or who have a positive perception of what they actually receive from their organization will increase their perceptions of employer promises.

***Hypothesis 6:*** ***Over time, newcomers' evaluations of their employment relationship will affect changes in their promissory beliefs about employer inducements.***

***Hypothesis 6A:*** *Over time there will be a positive relationship between newcomers' perceptions of the inducements they receive from their organization and changes in promissory beliefs about these inducements.*

***Hypothesis 6B:*** *Over time there will be a positive relationship between newcomers' perceptions of promise fulfillment by their organization and changes in promissory beliefs about employer inducements.*

We expect that this principle of adaptation to reality does not only operate for employer inducements but also for the employee side of the psychological contract. Newcomers who experience to offer their organization less than they had promised will decrease their subsequent perceptions of promises made, while newcomers who believe to contribute more than promised will increase their subsequent promissory beliefs. The same reasoning holds for the influence of perceptions of actual contributions to the organization.

***Hypothesis 7:*** ***Over time, newcomers' evaluations of their employment relationship will affect changes in their promissory beliefs about employee contributions.***

***Hypothesis 7a:*** *Over time there will be a positive relationship between newcomers' perceptions of the contributions they make to their organization and changes in their promissory beliefs about these contributions.*

***Hypothesis 7b:*** *Over time there will be a positive relationship between newcomers' perceptions of promise fulfillment by themselves and changes in their promissory beliefs about employee contributions.*

Considering the difference between the encounter and acquisition stage of socialization (Anderson & Thomas, 1996), we expect that these relationships will be most apparent during the first months after entry because it is mainly during the encounter stage that newcomers actively search for information about their employment relationship and that they are willing to adapt their psychological contract schema as a function of reality (Rousseau, 2001b).

#### *5.2.2.2. Reciprocity between Employer Inducements and Employee Contributions over Time*

According to the reciprocity principle (Blau, 1964; Homans, 1961), the interplay of giving and receiving within the context of the employment relationship makes that over time there is an increase in reciprocal obligations (i.e. a positive spiral of reciprocal inducements and contributions over time). Inversely, when both parties reciprocate each other in *not* fulfilling their promises this would cause a negative spiral. Building on existing research on the impact of perceived employer contract fulfillment on newcomers' attitudes and behaviors (Robinson & Morrison, 1995; Robinson, 1996; Robinson & Rousseau, 1994) and on two studies that have directly assessed reciprocity between perceived employer and employee obligations using a sample of more senior employees (Coyle-Shapiro & Kessler (2000a; 2000b), we expect that newcomers' evaluations of contract fulfillment by one party will affect changes in their perceptions of promises made by the other party. More specifically, we expect that newcomers' evaluations of employer inducements will affect changes in their perceptions of what they have promised their employer, while newcomers' evaluations of their own contributions will affect changes in their perceptions of what their employer has promised them.

***Hypothesis 8:*** ***Over time, newcomers' evaluations of employer inducements will affect changes in their promissory beliefs about employee contributions.***

***Hypothesis 8A:*** *Over time there will be a positive relationship between newcomers' perceptions of the inducements they receive from their organization and changes in their promissory beliefs about employee contributions.*

***Hypothesis 8B:*** *Over time there will be a positive relationship between newcomers' evaluations of promise fulfillment by their employer and changes in their promissory beliefs about employee contributions.*

***Hypothesis 9:*** ***Over time, newcomers' evaluations of their contributions will affect changes in their promissory beliefs about employer inducements.***

***Hypothesis 9A:*** *Over time there will be a positive relationship between newcomers' perceptions of the contributions they make to their organization and changes in their promissory beliefs about employer inducements.*

***Hypothesis 9B:*** *Over time there will be a positive relationship between newcomers' perceptions of promise fulfillment by themselves and changes in their promissory beliefs about employer inducements.*

Since reciprocity is presumed to be a central element of the psychological contract, and considering the evidence on the role of reciprocity in psychological contract changes among more senior employee (Colye-Shapiro & Kessler, 1998), we expect this influence to be prevalent during both stages of the socialization process.

### 5.2.3. The role of Information Seeking in Psychological Contract Development

Research on newcomer information seeking has shown that information seeking positively affects newcomer adaptation (Bauer *et al.*, 1998; Morrison, 1993b; Saks & Ashfort, 1997b). Therefore we expect that with respect

to psychological contract development, newcomer information seeking will be positively related to the evaluations newcomers make of their employment relationship. Newcomers who spend more time in seeking information about the inducements they can expect of their employer and the inducements their employer expects of them will be less likely to discover after some time that their expectations do not match with reality and thus there is less risk for disappointments. We make no predictions of causality within or across single time periods but we expect that over time, contract-related information seeking will influence newcomers' psychological contract evaluations and their general evaluations of the employment relationship.

***Hypothesis 10:*** ***Over time, newcomers' information-seeking behaviors about the inducements they can expect of their organization will affect their evaluations of their employment relationship.***

***Hypothesis 10A:*** *There will be a positive relationship between the frequency of newcomer information seeking during the socialization period and their perceptions of employer inducements after one year.*

***Hypothesis 10B:*** *There will be a positive relationship between the frequency of newcomer information seeking during the socialization period and their evaluations of employer promise fulfillment after one year.*

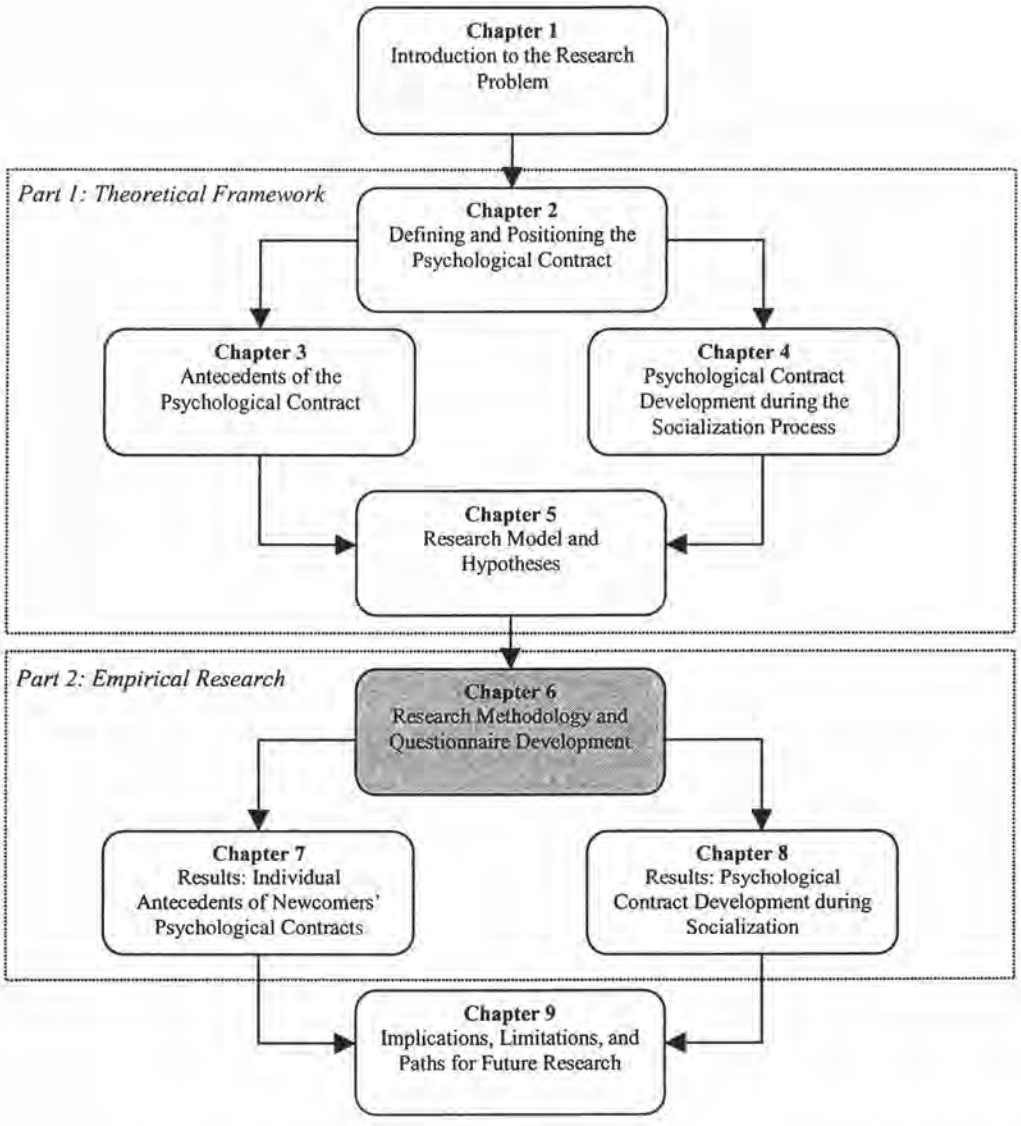
***Hypothesis 10C:*** *There will be a positive relationship between the frequency of newcomer information seeking during the socialization period and their evaluations of the extent to which their expectations are met by the organization after one year.*

***Hypothesis 10D:*** *There will be a positive relationship between the frequency of newcomer information seeking during the socialization period and their general satisfaction with their employment relationship after one year.*

# PART 2
# EMPIRICAL RESEARCH

CHAPTER STRUCTURE

# Chapter 6
# Research Methodology and Questionnaire Development




*The empirical part of this thesis consists of a longitudinal study that aims to answer the two major research questions we address in this thesis: (1) What is the relationship between newcomers' individual characteristics and the content and features of their psychological contracts at organizational entry?; and (2) How does the psychological contract of newcomers develop during the socialization process? Although both research questions are treated within one single study, the two groups of hypotheses we have formulated to answer them will be tested and reported separately in Chapter 7 and Chapter 8.*

*In the current chapter, we describe our methodology and the measures that were included in our study. We begin with a rationale regarding the selection of the research design (section 6.1), followed by a description of the organizations and the samples included in the study (section 6.2). In section 6.3, we describe the procedures we followed to generate our data. The measurement instruments we used are presented in section 6.4. Section 6.5 presents information about the analyses we conducted to assess the possible effects of subject attrition and missing data. Finally, in section 6.6 we motivate the choices we made with respect to the analyses of our data. A summary of this chapter and some concluding remarks are given in section 6.7.*

## 6.1. RESEARCH DESIGN

"*Both longitudinal and multilevel designs can provide invaluable empirical evidence for many, if not most, of the central assumptions made by theories in the social and behavioral sciences*" (Schnabel, Little & Baumert, 2000: 9). In order to test our research hypotheses, we conducted a five-wave longitudinal field study in eight organizations. Below, we describe the two major characteristics of our research design: the longitudinal nature of the study (section 6.1.1.), and the choice for a field study design involving a restricted number of research sites (section 6.1.2.).

### 6.1.1. Longitudinal Design

Prior research has assessed employees' psychological contracts in three ways:

(1) A *cross-sectional comparison* of different groups of employees' perceptions regarding their psychological contracts (e.g. Coyle-Shapiro & Kessler, 1998; Guest & Conway, 1997; 1998; Herriot *et al.*, 1997);

(2) An employee's *retrospective assessment* of the degree of psychological contract fulfillment compared with initial promises made by the employer, importance attached to contract terms and/or prior expectations (e.g. Guest *et al.*, 1996; 1998; 1999; Ho, 1999; Ten Brink *et al.*, 1999);

(3) A *longitudinal comparison* of employees' psychological contract perceptions with their subsequent judgements of psychological contract fulfillment and re-definition of contract terms (e.g. Freese *et al.*, 1999; Robinson, 1996; Robinson & Morrison, 1995; Robinson *et al.*, 1994; Robinson & Rousseau, 1994).

Our review of the literature made it clear that in order to build knowledge and test hypotheses about the development of newcomers' psychological contracts, taking into account evolutions over time is not only advisable, but that it is almost a necessary condition (Baltes & Nesselroade, 1979). Therefore, we decided to conduct a ***longitudinal prospective panel survey*** (Menard, 1991). *Longitudinal* implies that the entity under investigation is observed repeatedly as it exists and evolves over time. Thus, variation of time and repeated observations are essential parts of a longitudinal research (Baltes & Nesselroade, 1979; Finkel, 1995). A *panel* is defined as a group of subjects that is as a whole retained in a study and that is measured repeatedly (Finkel, 1995; van der Kamp & Bijleveld, 1998). Panel *surveys* are surveys in which similar quantitative measurements are made on the same sample at different points in time (Kasprzyk, Duncan, Kalton & Singh, 1989). In our study, the panel consists of organizational newcomers. The unit of analysis is thus the newcomer's psychological contract at a given measurement occasion (Michela, 1990). The design is *prospective* since the panel of newcomers is followed prospectively, in contrast with retrospectively, starting with a first measurement at organizational entry and followed up to one year after entry.

A longitudinal design has several advantages compared with a cross-sectional design. First, it allows us to capture *changes* in newcomers' psychological contracts over time and to study interindividual differences in this change process (Baltes & Nesselroade, 1979; Chan, 1998). Second, it allows us to draw conclusions about the direction of the relationships between observations, thereby making *causal interpretations* more valid than when using self-report measures in a cross-sectional design (Baltes & Nesselroade, 1979; Crampton & Wagner, 1994). Third, using a longitudinal design reduces (but not overcomes) the problems of *common method variance* inherent in using only perceptual measurements in a cross-sectional research design. Fourth, longitudinal data have *more statistical possibilities* regarding model building and testing. For instance, longitudinal data may produce more robust and efficient estimators (Bollen, 1989; Cook & Campbell, 1979).

In our ***first research question*** we focus on *individual antecedents* of newcomers' psychological contracts. Although in principle this question could also be answered using a cross-sectional research design, using a longitudinal study makes use of the second and third advantage listed by Baltes & Nesselroade (1979): making more valid causal interpretations and reducing the problem of common method variance. In our ***second research question*** we address *intraindividual changes* and *interindividual patterns (differences as well as commonalities)*

*of intraindividual change* in newcomers' psychological contracts. In accordance with Baltes & Nesselroade's (1979) discussion of longitudinal research, our study is oriented towards both *description* and *explanation* as necessary ingredients for knowledge about psychological contract development. In this way we make use of the advantages of longitudinal research listed above.

Despite its many advantages, we are also aware of the fact that a longitudinal research design is not without problems such as testing effects, selection, and mortality of subjects (Cook & Campbell, 1979; Schwab, 1999; Vondracek, 1990). We will describe how we have dealt with these issues in the following sections. Of particular interest here are the problems associated with the use of one single cohort panel, which implies that ontogenetic effects are confounded with historical effects (Menard, 1991; Vondracek, 1990). More specifically, for this research it means that there are possible confounding effects of the current economic and labor market situation both on newcomers' individual characteristics as well as on their perceptions and evaluations of their psychological contracts. This implies that the results of our research have to be related to the social-economic context in which it is undertaken

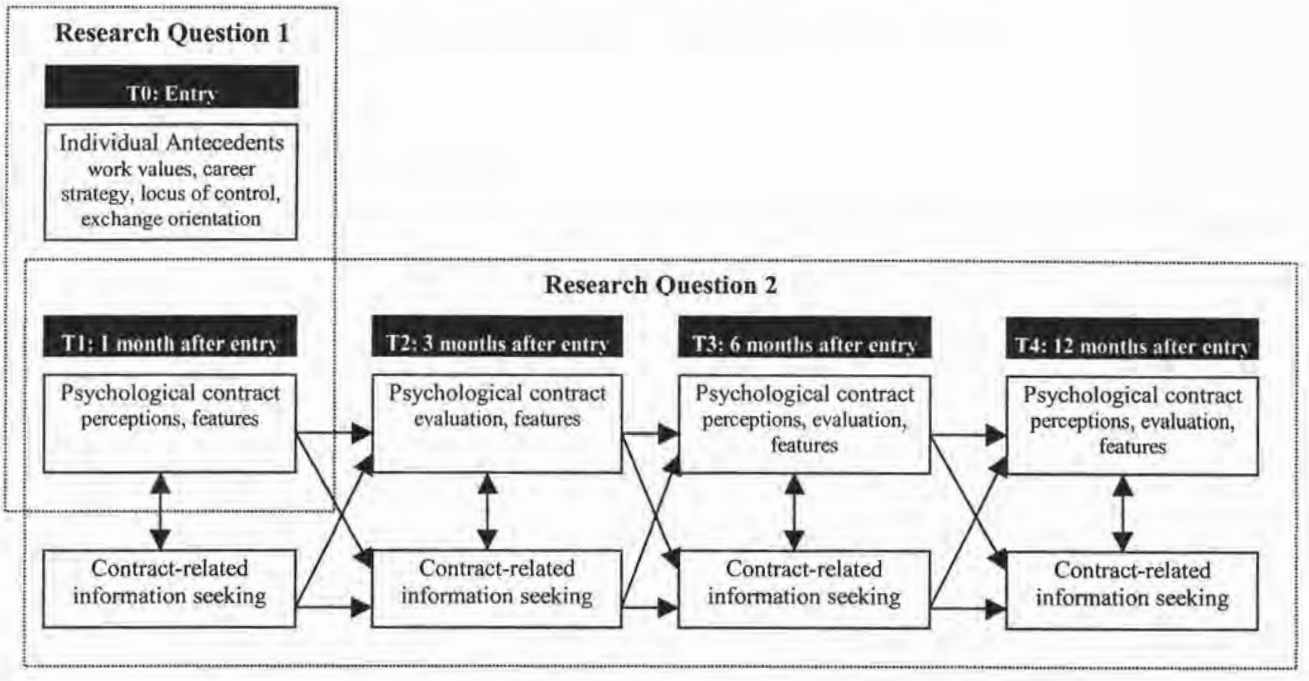
### 6.1.2. Selection of Causal Lags

Baltes & Nesselroade (1979) point out that it is important to recognize that the design of longitudinal work should be modified according to one's conception of historical causation in a given domain of research. Such specification applies to the *number of data collection waves* and to the *spacing of these waves*. In defining our causal lags, we relied upon socialization research (e.g. Bauer *et al.*, 1998; Fisher, 1986; Saks & Ashforth, 1997a). Socialization researchers generally agree that the first year after organizational entry is a valid time frame for studying socialization (Ashford & Black, 1996; Fisher, 1986), so we decided to focus our study on the first year of employment. Within this period, five data collection waves are organized, in which the following variables are measured:

**T0:** At organizational entry: Individual antecedents and control variables
**T1:** One month after entry: Psychological contract perceptions, features & information seeking
**T2:** Three months after entry: Psychological contract evaluations, features & information seeking
**T3:** Six months after entry: Psychological contract perceptions, evaluations, features, & information seeking
**T4:** Twelve months after entry: Psychological contract perceptions, evaluations, features, & information seeking

The first data collection wave (T0) serves as a baseline-measurement in which only time-invariant antecedent variables and control variables are measured. Time variant variables are repeatedly measured during the second to fifth data collection waves. The second wave (T1) closely follows the first wave in order to make sure that newcomers only have limited organizational experiences by which their psychological contract perceptions could be affected. The timing of the subsequent waves (T2, T3, T4) is based on prior socialization and psychological contract research suggesting that 3, 6 and 12 months after entry are meaningful intervals in the socialization process (Anderson & Thomas, 1996; Ashford & Black, 1996; Bauer *et al.*, 1998; Fisher, 1986; Nelson *et al.*, 1991; Saks & Ashforth, 1997a; 1997b). Figure 6.1 represents the longitudinal design in relation with our research questions.

Figure 6.1: Overview of the Longitudinal Design in Relation with our Research Questions




## 6.2. RESEARCH POPULATION AND SAMPLE

Our research population consists of organizational newcomers working for eight organizations, who are included in our panel at their first day of employment in their new organization until one year after entry. In this paragraph we successively describe the sample of organizations (section 6.2.1) and the sample of newcomers in each organization (section 6.2.2).

### 6.2.1. Organizations

In total, twelve approaches were made to organizations seeking for participation. In the end, eight organizations actually participated. We selected these organizations following the logic of *deliberate sampling for heterogeneity* (Cook & Campbell, 1979). Since it was not our objective to explicitly test for differences in psychological contract development across organizations we did not take differences in human resource practices or other organizational policies into account as criteria for selecting organizations. Instead, the main criterion based on which we sought to establish variability was the *industry* to which the organization belonged. We focused on four industries that differ in the nature of products or services and in the type of jobs offered, but which are comparable in terms of their relation with the labor market. The latter means that at the time when the study was set up they were all confronted with a shortage of professional employees on the labor market needed to fill in their vacancies. Based on these criteria we selected the following industries: (1) *consulting*, (2) *telecommunication*, (3) *electronics*, and (4) *financial services*.

Our selection of organizations to contact in each of these industries was based on a number of factors that we wanted to control for: (1) organizational size (> 1000 employees), (2) policy of hiring a substantial number of newcomers, and (3) profile of employees (professional employees with a higher education who were hired for clerical or managerial jobs, not blue collar workers). The first two criteria are important in view of the five data collection waves and the importance of having a sufficient sample of newcomers in each research site. We used the third criterion for reasons of comparability and to control for additional variance between newcomers due to education or job level.

It was our goal to select two organizations within each of the four industries. In each organization we contacted the human resource director and made an appointment to explain the objectives of the study and practical implications of participation. For the *consulting sector*, the two consulting firms that we contacted both agreed to participate. For the *telecommunication sector*, we contacted three organizations and these were all found willing to participate. However, due to practical problems with contacting the newcomers and because of internal changes within the human resource department, the study could not start in one of these companies, leaving us with two telecommunication firms. In the *electronics sector* two firms were contacted and both agreed to participate. One of these consists of three largely independent business units, of which one was situated in telecommunication and the other two in electronics and electrotechnics. We had most difficulties with finding two firms within the *financial services sector*. Five organizations had to be contacted in order to find two that were willing to participate. The major reason for not participating was that at the time of the study the major financial services firms in Belgium were undergoing fundamental changes due to mergers and acquisitions. Therefore three of the five human resource directors preferred not to participate.

Our sample of organizations has several characteristics that have implications for the *external validity* of our results. First, all organizations employ more than 1000 employees and they all hire a substantial number of newcomers on a yearly basis. It is important to take into account that the human resource policies in these large organizations differ substantially from human resource policies in small and medium sized companies. Given the importance of the organizational context in psychological contract research these differences will probably contribute to differences in psychological contract development among organizational newcomers. This means that there can be substantial differences between the psychological contracts of employees in our target population of large organizations and those employees being employed by small or medium sized companies.
Second, the eight companies in our sample are comparable in that these are all service organizations. This probably restricts the generalizability of our results to large service organizations.
Finally, the companies all employ core employees with competencies for which there was a shortage on the labor market at the time of the survey. Due to these shortages each of these organizations paid major attention to the attraction of qualified employees as well as to human resource policies aimed at retaining these employees.

In each of the selected organizations we conducted in-depth interviews with human resources representatives involved in the attraction and introduction of new employees. We also participated personally in the orientation seminars that were organized for newcomers in each of the organizations and we collected and studied the written material (internal documents about human resources policies and documentation provided to newcomers). This qualitative information enhanced our understandings of the organizational context in which the process of newcomer psychological contract development took place.

In all organizations the data collection procedure and sampling principles were discussed with the human resource director. Given the importance of retaining a sufficient numbers of respondents in each organization and considering the preferences of the human resource directors to include all newcomers in the study, we decided not to focus a priori on one functional group within each organization but instead to include all newcomers that entered the organization during the period of the study. Each organization received a report with the results concerning the own organization, benchmarked with the results for the total sample and results for specific sub-groups of employees (i.e. freshmen versus more experienced newcomers and differences between functional domains). In the following section we describe the characteristics of the sample of newcomers included in our study.

### 6.2.2. Newcomers

We successively discuss our target sample and respondents (section 6.2.2.1), subject attrition (section 6.2.2.2), and demogaphic characteristics of our sample (section 6.2.2.3).

#### *6.2.2.1. Sample Selection and Respondents*

Our target group consisted of newcomers with a higher education, who had not worked previously for the organization (e.g. as a consultant) and who were hired with a contract of permanent employment. In total 1361 newcomers were solicited to participate in the study. The study started in August 2000. In each of the participating organizations, newcomers who belonged to our target group and who were hired between August 2000 and March 2001 were included in the panel. This period was not exactly the same in each organization since the study did not start at the same moment everywhere. In total this implies that the first data collection wave involved eight months. This extended period was needed in order to arrive at a sufficient sample size in each organization. Since the longitudinal research involved five waves of data collection covering the first year of employment, this means that the fifth data collection period ended in March 2002. Thus, the whole study was spread over a 20-months period

In Table 6.1 we represent the solicited sample and response rates for the eight organizations at each of the five data collection waves. The number of respondents refers to those respondents who returned *usable* questionnaires. This is the most relevant number for calculating the actual response rate (Baruch, 1999).

If it turned out at T0 that a respondent did not belong to the target group (e.g. the newcomer had been working for the firm as a consultant before), he or she was excluded from the sample and this was also taken into account when calculating the response rate (i.e. the number of respondents not belonging to the target group was subtracted from the solicited sample).

Table 6.1: Overview of Solicited Samples and Response Rates at Each Data Collection Wave

| | T0 | | | T1 | | | T2 | | | T3 | | | T4 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Research site | *Solicited sample* | *Respon-dents* | *% response* | *Solicited sample* | *Respon-dents* | *% response* | *Solicited sample* | *Respon-dents* | *% response* | *Solicited sample* | *Respon-dents* | *% response* | *Solicited sample* | *Respon-dents* | *% response* |
| **A** | 62 | 62 | 100% | 70 | 53 | 76% | 53 | 37 | 70% | 49 | 33 | 68% | 52 | 21 | 40% |
| **B** | 197 | 197 | 100% | 199 | 143 | 72% | 143 | 109 | 76% | 124 | 100 | 81% | 178 | 80 | 45% |
| **C** | 280 | 269 | 100%[1] | 269 | 162 | 60% | 162 | 112 | 69% | 159 | 100 | 63% | 264 | 93 | 35% |
| **D** | 345 | 208 | 62%[2] | 209 | 164 | 79% | 164 | 138 | 84% | 160 | 121 | 76% | 332 | 121 | 37% |
| **E** | 287 | 171 | 61%[3] | 173 | 143 | 83% | 143 | 113 | 79% | 140 | 92 | 66% | 278 | 86 | 31% |
| **F** | 86 | 53 | 62% | 54 | 46 | 85% | 46 | 37 | 80% | 45 | 36 | 80% | 84 | 35 | 42% |
| **G** | 77 | 77 | 100% | 78 | 62 | 80% | 63 | 41 | 65% | 62 | 35 | 57% | 66 | 37 | 56% |
| **H** | 27 | 27 | 100% | 27 | 23 | 85% | 23 | 18 | 78% | 23 | 17 | 74% | 20 | 10 | 50% |
| **Total** | **1361** | **1064** | **80%** | **1079** | **796** | **74%** | **796** | **605** | **76%** | **762** | **534** | **70%** | **1274** | **483** | **38%** |

[1] The original response was 280, but eleven respondents did not belong to our target group (i.e. they had been working as a consultant for this company before). Hence, they were excluded from the analyses and the response rate should thus be calculated as $^{269}/_{(280-11)} = 100\%$.

[2] The initial response was 216 but eight respondents were excluded from the analyses because they did not belong to our target group or because we received their questionnaire too late. The response rate should thus be calculated as $^{208}/_{(345-8)} = 62\%$.

[3] The initial response was 176 but five respondents were excluded from the analyses because they did not belong to our target group or because we received their questionnaire too late. The response rate should thus be calculated as $^{171}/_{(287-5)} = 61\%$.

[4] In calculating this response rate, we take into account the subjects excluded from the analyses in research sites C, D and E: $^{1064}/_{(1361-24)} = 80\%$.

Respondents were also excluded when their percentage of item non-response in a questionnaire exceeded 10%. In case respondents were excluded at one data collection wave based on this criterion, they were still retained in the other waves except when their item non-response percentage exceeded 10% at more than two waves. Those respondents whose non-response percentage exceeded 10% in more than two waves were excluded from all analyses. The number of respondents who were excluded from analyses based on these exclusion criteria was always less than 3% at each wave and for each organization.

At T1 the solicited sample also included those newcomers who had sent back their T0 questionnaire too late (and thus were excluded from the T0 respondents) and newcomers who, due to practical or administrative reasons, belonged to our target group but who had not received the first questionnaire or who had been unable to fill out this questionnaire but who had asked if they could participate in the subsequent waves.

At T3 and T4 the solicited sample did not correspond with the number of respondents at the previous wave. At T3, we distributed the questionnaire to all respondents who had participated at T1, except those respondents about whom we were informed that they were no longer employed by the organization, those who had informed us that they were no longer willing to cooperate in the study, those who had too much missing data in previous waves and those who no longer belonged to our target group (e.g. due to a long-term international assignment). A comparable strategy was followed at T4, where the final questionnaire was distributed to the full initial sample, using the same exclusion criteria as at T3.

For those organizations where the first questionnaire was distributed collectively and filled out by the newcomers during the introduction seminar, there was full participation of all newcomers (i.e. a 100% response rate) at T0. Actually no newcomers refused their cooperation at T0 in these organizations, although participation was clearly communicated to be on a voluntary basis. The social pressure that probably exists when time is reserved for filling in the questionnaire during the introduction seminar, together with the fact that this was the first day for newcomers in their new work environment, can explain this 100% response rate. In these organizations the attrition at T1 should actually be considered as non-response since it was only at T1 that these newcomers were contacted in a more impersonal way, thereby giving them more freedom to individually decide about their cooperation (free from social pressures). Since only those respondents who had participated in at least the first and second data collection waves are included in our analyses of our hypotheses, the possible confounding effects due to the collective administration at T0 in these six organizations are reduced (Baruch, 1999).

For those organizations where the first questionnaire was distributed individually by mail to the newcomers (organizations D, E, and F), the response rate of 61% - 62% at T0 is higher than the mean response rate of 55.6% in academic studies as reported by Baruch (1999). If we consider the response rate at T1 as the "actual" response rate in those organizations where there was full participation at T0, these rates range between 60% and 85%, which is also higher than the mean response rate in academic studies.

#### *6.2.2.2. Subject Attrition*

Since it is important to distinguish between missing data due to initial subject self-selection (i.e. initial response rate) and subject attrition and since attrition is a major concern in longitudinal research (McArdle & Bell, 2000), we here discuss the attrition rates over the five data collection waves. In Table 6.2 we compare the number of respondents having participated in the full study with the originally solicited samples and with the initial respondents.

As shown in Table 6.2, the *percentage of the originally solicited respondents having participated in the full study* ranges from 23% for to 36%. For the total sample it is 26% (i.e. a 76% attrition rate). To have a more pure indication of attrition, as distinct from initial non-response, we also calculated the *percentage of respondents to the full study compared with the initial response rate* (Chan & Schmitt, 2000). For organizations E, F and G the initial response at T0 was used as a basis for comparison. For these organizations (E, F, G) the attrition rate ranges from 53% to 61%. For the other organizations (where there was 100% response at T0), we used the T1 response as the basis for calculating attrition. The attrition rates within these organizations range from 55% to 68%. For the total sample there is an attrition rate of 59%. Inversely stated, it means that 41% of initial participants have participated in the full study.

Table 6.2: Overview of Attrition Rates

| Research site | *Number of respondents to the full study* | *% respondents to the full study compared with the solicited sample at T0* | *% respondents to the full study compared with respondents at T0 / T1*[1] | *Attrition rate* |
|---|---|---|---|---|
| A | 17 | 27% | 32% | 68% |
| B | 62 | 32% | 43% | 57% |
| C | 61 | 22% | 38% | 62% |
| D | 90 | 26% | 43% | 57% |
| E | 67 | 23% | 39% | 61% |
| F | 25 | 29% | 47% | 53% |
| G | 28 | 36% | 45% | 55% |
| H | 9 | 33% | 39% | 61% |
| **Total** | 359 | 26% | 41% | 59% |

[1]For organizations A, B, C, G, and H, the percentage of respondents to the full study compared with initial response (as a basis for calculating the attrition rates) was based on the respondents at T1 in view of the full participation at T0 in these organizations.

As for response rates, there exist no general norms in the literature about what acceptable attrition rates are. Therefore, to evaluate our response rates in view of published longitudinal studies, we briefly discuss attrition found in previous research. Bauer *et al.* (1998) have made a review of longitudinal socialization studies in which they have summarized for each study the number of data collection waves, timing of causal lags and response rates for each wave. Since these studies differ in the time span or the number of data collection waves used, we have no direct basis of comparison for our attrition rates. In those studies reported by Bauer *et al.* (1998) that come closest to our longitudinal design (using three data collection waves and time spans between 9 and 12 months), the attrition of subjects at the third wave compared with the response rate (not the originally solicited sample) at the first wave varies between 33% (Black & Ashford, 1995) and 43% (Saks & Ashforth, 1996).
Compared with these studies, there is a higher attrition rate in our study but we also used more data collection waves, which could explain these differences. For their four-wave longitudinal study using an eleven-month time span, Meyer *et al.* (1991) report initial response of 101 newcomers and a response rate of 66% at the fourth wave (i.e. a 33% attrition rate, which is lower than in our study). More recently, Chan & Schmitt (2000) report a low initial response rate at their first data collection wave, but 71% response at the fourth wave (i.e. only 29% attrition), but this study was conducted within a three-month time span, making a comparison with our attrition rates difficult. Finally, in their longitudinal study covering the first six months of employment and using three waves, Lance *et al.* (2000) report an attrition rate of 67%, which is comparable to the attrition rate in our study, although these authors used a shorter time period and fewer waves.
Based on this information we can conclude that the attrition rates in our study are comparable with prior longitudinal studies with samples of organizational newcomers.

Since it is not only the rate, but also the *pattern of attrition* with respect to critical variables in the study that is important (Menard, 1991), we have conducted several analyses to test for attrition bias. These are reported in section 6.6.

#### *6.2.2.3. Demographic Characteristics of the Samples*

In this section we discuss the demographic characteristics of the initial sample of respondents and of those respondents who participated in the full study. We do not elaborate on sample characteristics at each of the five data collection waves; this will be done when testing for attrition bias in section 6.6 and in the subsequent chapters, where we describe the characteristics of the sample included to test our hypotheses.

Characteristics of T0 Sample

The demographic characteristics of the sample of newcomers that participated in the first data collection wave is represented in Table 6.3.

Table 6.3: Age, gender, and prior work experience in of the initial sample of newcomers.

| Research site | N | Age | | Gender | Prior work experience | Years of prior work experience[1] | |
|---|---|---|---|---|---|---|---|
| | | Mean | sd | % male | % prior experience | Mean | sd |
| A | 62 | 24.03 | 2.24 | 57.4% | 23.0% | 2.77 | 2.13 |
| B | 197 | 25.74 | 4.92 | 59.9% | 40.6% | 5.57 | 5.97 |
| C | 269 | 27.59 | 6.01 | 61.3% | 76.2% | 6.43 | 6.19 |
| D | 208 | 27.88 | 6.15 | 72.6% | 63.3% | 7.42 | 6.51 |
| E | 171 | 27.90 | 6.34 | 76.6% | 69.4% | 7.76 | 6.56 |
| F | 53 | 25.42 | 5.27 | 77.4% | 28.3% | 8.60 | 6.87 |
| G | 77 | 27.23 | 5.38 | 53.2% | 76.6% | 6.24 | 6.20 |
| H | 27 | 25.37 | 5.66 | 40.7% | 48.1% | 6.54 | 6.46 |
| TOTAL | 1064 | 26.96 | 5.77 | 65.2% | 59.8% | 6.73 | 6.31 |

[1] Calculation based on those respondents with prior work experience.

Comparing the samples from the eight organizations at T0, they are comparable in terms of respondents' mean *age*. The mean age at organizational entry is less than 28 years in each of the organizations. One-way ANOVA shows that there are significant differences in mean age between the organizations ($p < .001$). Post-hoc tests indicate that the samples from both consulting firms are significantly younger than the telecommunication firms and one financial services firm (G). These differences are significant at the $p < .05$ level.

With respect to *gender,* in all organizations men are more represented in our sample than women, the overall percentage of men being 65.2%. The proportion of men versus women is most balanced organization G, while organizations E and F have the highest proportion of male respondents in their sample. The overall $\chi^2$ test for differences in proportions between organizations is significant at the $p < .001$ level.

A majority of respondents has *prior work experience* (59.8%). This percentage of experienced newcomers is the highest in organizations C and G, while it is the lowest in organizations A and F. The ranking of organizations with respect to the proportion of employees with prior work experience corresponds with the ranking as a function of respondents' mean age. The overall $\chi^2$-test for differences between organizations is significant at the $p < .001$ level. When focusing at those respondents indicating to have prior work experience, the mean number of years of experience ranges from 2.77 in organization A to 8.6 in organization F. One-way ANOVA shows an overall significant difference between organizations ($p < .05$), but the post hoc pairwise comparisons between organizations are all non-significant.

Characteristics of Full Study Sample

The demographic characteristics of those newcomers having participated in the full study, i.e. the five data collection waves, are summarized in Table 6.4.

The differences in *age* between organizations go in the same direction but they have become less outspoken. The general one-way ANOVA is still significant at $p < .05$, but pairwise post-hoc comparisons indicate that only the difference between organizations A and G is significant. The mean age for these 360 respondents at organizational entry is 27.02 years. For *gender*, the $\chi^2$ test for differences between organizations is significant at the $p < .05$ level. Organizations E, F, and G again have the highest proportions of male newcomers in their sample, in contrast with organizations G and H, where there is a more balanced proportion of men and women. The proportion of men in the total sample is 67.5.

Finally, when we look at *prior work experience* the majority of the sample still has prior work experience (57.5%), the differences between organizations again being significant in the same way as for the sample at T0. The mean number of years of experience is 6.67 but the differences between organizations are not significant, although at first sight there are substantial differences in Table 6.4. The lack of significant ANOVA results is due to the large variability within the samples compared with the mean sum of squares between groups.

Table 6.4: Age, gender, and prior work experience in of those newcomers who participated in the full study.

| Research site | N | Age | | Gender | Prior work experience | Years of prior work experience[1] | |
|---|---|---|---|---|---|---|---|
| | | Mean | sd | % male | % prior experience | Mean | sd |
| A | 17 | 23.76 | 1.20 | 64.7% | 5.9% | 2.00 | .[2] |
| B | 62 | 26.15 | 5.22 | 58.1% | 41.9% | 6.46 | 6.14 |
| C | 62 | 28.35 | 1.20 | 59.7% | 85.5% | 6.29 | 5.92 |
| D | 90 | 27.20 | 5.68 | 74.4% | 57.8% | 6.69 | 5.84 |
| E | 67 | 26.94 | 3.78 | 77.6% | 62.7% | 6.02 | 4.85 |
| F | 25 | 26.00 | 6.59 | 80.0% | 28.0% | 11.57 | 8.62 |
| G | 28 | 29.54 | 5.76 | 53.6% | 82.1% | 7.83 | 6.49 |
| H | 9 | 23.89 | 4.11 | 55.6% | 33.3% | 4.67 | 3.51 |
| TOTAL | 360 | 27.02 | 5.64 | 67.5% | 57.5% | 6.67 | 5.88 |

[1] Calculation based on those respondents with prior work experience.
[2] n = 1

Comparison of Characteristics of T0 Sample and Full Study Sample

We also tested if there were significant differences between the demographic characteristics of the sample of respondents having participated in the full study and the sample at T0. An independent-samples *t*-test indicates that there is no significant difference with respect to respondents' mean age (27.02 for the full study sample compared with 29.96 for the sample at T0). The difference between the mean number of years of work experience is also non-significant (5.88 compared with 6.31).

The proportion of men versus women is also comparable for both groups (67.5% men in the full study sample compared with 65.2% in the sample at T0). The $\chi^2$-test for differences between the proportion of male respondents in both groups is not significant.

## 6.3. DATA COLLECTION PROCEDURE

At each data collection wave we used self-report questionnaires to collect our data. In this section we describe the procedures we followed in order to collect our data at each of the five waves. There was a difference between the procedure followed at the first data collection wave (T0) and the four subsequent waves (T1-T4). We also comment on some differences between the procedures followed in each of the organizations. We successively discuss the data collection procedure at T0 (section 6.3.1) and at the second to fifth data collection wave (section 6.3.2), and we describe our procedures to follow up responses (section 6.3.3).

### 6.3.1. First Data Collection Wave (T0)

The data collection procedure at T0 differed between organizations A, B, C, G and H on the one hand and organizations D, E and F on the other hand.

In the ***first group*** *(organizations A, B, C, G, H),* newcomers were informed about the study by a human resource representative and by the researcher ***during the orientation seminar*** that took place at the first day of newcomers' employment in their new job. We gave a brief presentation explaining the objectives and the structure of the study and at that moment we also distributed the first questionnaire. Since the newcomers were provided with the necessary time to fill out this questionnaire at that moment they could give it back to directly the researcher in a closed envelope.

In the ***second group*** *(organizations D, E, F),* this collective distribution of the first questionnaire was not possible for practical reasons. In organization D, there was a collective introduction seminar for newcomers but it was not possible to make free the necessary time to distribute and fill out the questionnaire. In organization E at the moment of the study the orientation seminar for newcomers did not always take place at organizational

entry but instead it was organized in a decentralized way in the different business units only when there was a sufficient number of newcomers. This meant that not all newcomers could participate in the seminar at the day of their entry in the organization. The same situation occurred in organization F, which also has geographically dispersed business units. Newcomers from all business units only participated in a joint orientation seminar several weeks after entry. For these practical reasons, questionnaires were ***sent out by normal mail*** to the newcomers. Human resource representatives of these three organizations were all informed about the study by the human resource director and they were asked to inform newcomers about the study when they came to sign their employment contract or at their first day in the company at the latest. Newcomers were told that they would be invited by the researcher to participate in the study and that they would receive a first questionnaire by normal mail within the first week of employment in their new job. In organization D this questionnaire was distributed to newcomers at their work address, while organizations E and F preferred it to be sent to their home address. In all three organizations, the first questionnaire and a letter explaining the objectives and structure of the study were accompanied by a pre-stamped return envelope that respondents could use to send the questionnaire back directly to the researcher. We received the list with names and addresses (home or work) from a human resource representative in each organization so that we could contact these employees directly.

### 6.3.2. Second to Fifth Data Collection Wave (T1 –T4)

In each of the eight organizations the second to fifth questionnaires were all individually distributed by the researcher. This was done by normal mail. At each wave, newcomers were informed by e-mail that the next questionnaire was forthcoming and they were encouraged to continue their participation. In both consulting firms this e-mail also contained a soft copy of the questionnaire since these newcomers were often working at the client's office, which would cause delays in the return of the questionnaires.

### 6.3.3. Follow Up of Responses

A personal coding system was needed in order to relate the newcomers' responses to the five questionnaires. Therefore two separate data files were created, one Excel file in which the personal codes of participants were linked to their names and other demographic information (e.g. starting date, address) and to information about the returning of their questionnaires. Another data file (SPSS) was constructed in which the answers to the questionnaires were entered together with the personal code but without other personal identification data. Subjects were clearly informed about this coding system by the researcher and they were formally guaranteed anonymity and confidentiality in the treatment of their responses. We assured the respondents (during the presentation at the orientation seminar or within the letter accompanying the questionnaires sent out by mail) that their employing organizations would only receive a general report with the study results for the company as a whole, without specifications that could lead to the identification of individual respondents. We also guaranteed them that the filled out questionnaires would never be handed over to their employer.

Based on the first data file (Excel file) we could follow up the return of sent out questionnaires. Reminders were sent by e-mail to those subjects who did not return their questionnaire within three weeks after they had received it. This period was shortened to two weeks at T0 (for organizations D, E, F) since there were only four weeks between the first and second data collection wave. We also asked the participating organizations to regularly remind all newcomers about the project and to stress the importance of their participation. This was necessary given the longitudinal nature of the study and the fact that subjects needed to be encouraged to continue their participation over a one-year period (Menard, 1991). Since attrition is a major issue in longitudinal research we have spent much time motivating subjects to continue their participation.

## 6.4. MEASURES

We used self-report questionnaires to measure the study variables. Although the use of self-report measures has a number of disadvantages, such as the possible influence of social cues, personal characteristics that are not controlled for and common method variance, this type of subjective measure was most feasible for our study since it is inherent to the definition of the psychological contract that it is an idiosyncratic and subjective construct (Rousseau, 1995). Therefore measuring newcomers' subjective perceptions and evaluations of their psychological contracts is the most relevant way to obtain information on the psychological contract (Rousseau, 1995). Also the antecedent variables included in our study are mainly perceptual in nature and it is a long-standing tradition in the literature to measure them through self-report questionnaires. Information-seeking behavior is the least perceptual variable and it could also have been measured through observation or by third party reports. However, in the socialization literature this variable has only been measured using self-reports. Moreover, for practical reasons it was not possible to involve third parties (e.g. supervisor) in the study given the already complex nature of the research design. Therefore we decided to use self-report measures for all variables included in the study. In order to reduce the possible effects of common method variance we only analyzed lagged relationships.

In the remaining part of this section we first describe the procedure we followed to select and develop measurement scales (section 6.4.1) and the methods and criteria we used to evaluate the quality of our measures (section 6.4.2). This is followed by an overview of the variables measured at each of the five data collection waves (section 6.4.3.). The subsequent sections successively address these different groups of variables. In section 6.4.4 we describe the scales we selected from the literature to measure the time-invariant antecedent variables included in our study. In section 6.4.5 we elaborate on the psychological contract measures we have developed for this study and the procedures we followed to develop these measures. In section 6.4.6 we describe the measurement of psychological contract features. Section 6.4.7 contains a description of the measurement of information seeking and in section 6.4.8 we describe two measures general employee attitudes. Finally in section 6.4.9 we describe our measures of the socio-demographic control variables.

### 6.4.1. Procedure for the Selection and Development of Measurement Scales

Defining our ***constructs*** at a conceptual level was an essential first step in the selection and development of construct valid measures (Bagozzi & Edwards, 1998). The selection of constructs to be measured at each of the five data collection waves was based on our conceptual model and on the proposed relationships between constructs over time.

At an empirical level, the selection of ***items*** used to measure each of the constructs was done in three stages: (1) literature review, (2) pilot studies, and (3) longitudinal study.
First, the relevant *literature* was reviewed for existing scales. Based on our review, scales were selected for measuring the time-invariant individual antecedents, psychological contract features, information seeking, and general employee attitudes. However, as outlined earlier in this thesis, as to date no generally accepted scales exist for measuring the psychological contract. Therefore, we decided to develop a new scale based on the instruments we found in the literature.
In a second stage two *pilot studies* were conducted to empirically test the reliability and validity of some of the scales we had selected from the literature to measure antecedent variables. In these pilot studies we also pre-tested the psychological contract scales we had constructed. The first pilot study was carried out in June 1999 among graduate students who were entering the labor market[1]. Building on the results from this study, we

[1] A full description of this study is given in the following paper: De Vos, A., & Buyens, D. (2001). Managing the Psychological Contract of Graduate Recruits: A Challenge for Human Resource Management. *Working paper No. 2001/100, Ghent University, Faculty of Economics and Business Administration.* This paper has been presented at the *15th EIASM workshop on Strategic HRM,* INSEAD, France, March 30 – April 1 2000.

conducted a second pilot study in June 2000. Again, the sample consisted of graduates who had recently entered the labor market.

Third, in our *longitudinal study* we evaluated the structure, reliability and validity of all scales by conducting exploratory and confirmatory factor analyses, reliability analyses and tests for convergent and discriminant validity. These tests and the criteria for evaluation are further described in the next section. Based on the results of these tests, composite measures have been calculated for all scales by averaging the scores across the items included in the scale, after reverse scoring of negatively worded items.

We will further elaborate on the general procedure for item selection and development when we discuss each of the scales in the subsequent sections.

### 6.4.2. Examination of Reliability, Factor Structure, and Validity

In our *pilot studies*, exploratory factor analyses and reliability analyses were used. In our *longitudinal study* those scales that were selected from the literature were tested for their reliability. The newly developed psychological contract measures were examined with respect to their factor structure, reliability and validity. In this section we successively discuss the procedures and evaluation criteria used to assess reliability (section 6.4.2.1), factor structure (section 6.4.2.2), and validity (section 6.4.2.3).

It is important to note that, in view of the longitudinal research design and the use of repeated measures, it is also important to examine the longitudinal measurement invariance of variables measured repeatedly. In section 6.7.2.1 we will describe the procedure we followed to assess the longitudinal measurement invariance of our repeated measures and the results of these tests will be presented in Chapter 8.

#### *6.4.2.1. Reliability*

Scales selected from the literature as well as newly developed scales were subjected to reliability analysis using Cronbach's Alpha coefficient of internal consistency (Sekaran, 2000; Stevens, 1996). Sekaran's (2000) guidelines for what constitutes an acceptable Alpha coefficient will be used: an Alpha coefficient of less than .60 indicates poor measures; above .70 acceptable measures; and above .80 good measures. In this thesis, an Alpha coefficient of .60 will be taken as a minimally acceptable reliability coefficient.

#### *6.4.2.2. Factor Structure*

For our measures of the content and evaluative facet of the psychological contract we conducted both exploratory factor analyses (EFA) and confirmatory factor analyses (CFA). EFA was conducted in the pilot studies and at T1 and T2 of the longitudinal study. Since it was the first time we used the newly developed psychological contract measures and since we only measured the content facet of the psychological contract in our pilot studies (assessing the evaluative facet was impossible because our subject group consisted of graduates), we decided to conduct an EFA on the different psychological contract scales when they were measured a first time in the longitudinal study. This was done for the content and evaluative two facets of both employer inducements and employee contributions. Based on a comparison of the results of these EFAs for each of the psychological contract facets we selected the most appropriate items. This factor structure was subsequently validated by means of CFA using the data collected at T3.

Exploratory Factor Analysis

We conducted exploratory factor analyses (EFA) using Principal Components Analysis (PCA) with varimax rotation in SPSS 10. We based our decision about the number of components to retain on the scree test and on Kaiser's eigenvalue > 1 criterion (Stevens, 1996). Our decision about which items to retain for each component was based on the following criteria: an item should have a loading of at least .40 on a factor and it should not have a loading of $\geq$ .40 on more than one factor (Stevens, 1996).

Confirmatory Factor Analysis

The psychological contract scales were assessed using confirmatory factor analysis (CFA). We only tested unidimensional measurement models, i.e. models specifying that each indicator loads on only one factor and that the measurement error terms are independent (Anderson & Gerbing, 1988). Unidimensional measurement models are preferred because they are more useful for the interpretation of latent constructs than multidimensional constructs in which, for example, indicators can load on more than one factor, because they allow for more precise tests of the convergent and discriminant validity of the indicators (Kline, 1998). For each measurement model at least three indicators per factor were specified in order for the model to be specified (Kline, 1998). We also took into account the guideline offered by Bentler (1995) to have a ratio of subjects to free parameters of 10:1, with a minimum ratio of 5:1, in structural equation analyses.

CFAs were conducted in AMOS 4.1, a software tool for structural equation modeling (SEM), using the Maximum Likelihood estimation procedure and the covariance matrix as input.

***Overall Model Evaluation.*** For each of the models tested, we first reviewed if there were "offending estimates". These are values of estimated parameters that are unacceptable. Examples are negative error variances and standardized coefficients exceeding 1.0 (Bollen, 1989; Kline, 1998). Secondly, we examined the overall goodness-of-fit of the model.

The most popular index for testing model fit is the $\chi^2$ goodness-of-fit statistic and the $\chi^2$/df statistic (Hu & Bentler, 1999; Kline, 1998). The $\chi^2$ assesses the magnitude of the discrepancy between the sample and fitted covariance matrices (Hu & Bentler, 1999). It is an *absolute fit index* in that it assesses how well an a priori model reproduces the sample data. Non-significance of $\chi^2$ ($p > .05$) is indicative of a good model fit. It indicates that the model fits the data well and that the discrepancy between the estimated variance-covariance matrix and the actual sample variance-covariance matrix is small (Bollen, 1989). The $\chi^2$/df ratio should be $\leq 2$ to 5 in order to have acceptable fit (Kline, 1998). However, because of its sensitivity to departures from normality and sample size it is considered to be of limited usefulness (Byrne, 2001; Marsh, Balla & McDonald, 1988; Kline, 1998). Therefore, it is recommended to use the $\chi^2$ test only in conjunction with other practical fit indices (Bollen, 1989; Vandenberg & Lance, 2000).

Several researchers have developed alternative fit indices and it is generally recommended that overall model fit is assessed based on multiple fit indices, since these indices each reflect somewhat different facets of model fit (Bollen, 1989; Byrne, 2001; Hu & Bentler, 1999; Kline, 1998). However, at present there is little consensus concerning which indices are the best (Kline, 1998; Vandenberg & Lance, 2000). Based on the recommendations formulated by Hu & Bentler (1999), Kline (1998) and Vandenberg & Lance (2000) we use three indices in addition to the $\chi^2$ and $\chi^2$/df statistics: (a) root mean square error of approximation (RMSEA): (b) Bentler's (1990) comparative fit index (CFI); (c) Tucker-Lewis index (TLI), now often referred to as the nonnormed fit index (NNFI). The RMSEA is an absolute fit index, like the $\chi^2$ statistic. The TLI and NNFI are *incremental fit indices*. They measure the proportionate improvement in fit by comparing a target model with a more restricted, nested baseline model.

The RMSEA measures how well the estimated model approximates the population covariance matrix per degree of freedom. Values below 0.05 are considered to indicate close fit, while values up to 0.08 indicate reasonable fit.

The CFI indicates the proportion in the improvement in the overall fit of the researcher's model relative to a baseline model. It is the index of choice for Bentler (1990), because it is good at assessing fit even in small samples. The TLI, also known as the Bentler & Bonett nonnormed fit index (NNFI), also indicates the improvement in overall fit but it includes a correction for model complexity. More complex models tend to fit the same data better than do simpler ones (Kline, 1998). The TLI takes this into account by correcting downward as the number of parameters increases and thus by penalizing less parsimonious models. However, one of the problems associated with the TLI is that it is not normed to fall between zero and one, and that its sample variability is larger than that of the CFI (Vandenberg & Lance, 2000). Both the CFI and the TLI are proposed to

be independent of sample size (Kline, 1998). In the literature there currently is a discussion about the cut-off criterion that should be used to evaluate a model based on the CFI and NFI indices (Vandenberg & Lance, 2000). Until recently, researchers agreed that CFI and TLI values close to .90 or higher were indicative of well-fitting models. In a simulation study of the impact of model misspecifications, Hu & Ben tler (1999) recently concluded that a more severe cut-off score of .95 should be used. However, Vandenberg & Lance (2000) argue that Hu & Bentler's (1999) study is the first in its kind and that until it has been extended by investigating additional simulation design characteristics it may be premature to throw out the .90 critical value. Vandenberg & Lance (2000) therefore suggest to view .90 as a lower bound of good fit with high confidence in fit emerging when the TLI and CFI meet or exceed .95.
In Table 6.5, we summarize the model fit indices we will use, together with recommended cut off values.

Table 6.5: Global Model Fit Indices and Cut off Values

| Fit index | Recommended cut off value indicative of good fit |
|---|---|
| $\chi^2$ | $p > .05$ |
| $\chi^2$/df | $\leq 2$ to 5 |
| RMSEA | $\leq .05$ to .08 |
| NNFI/TLI | > .90 – close to .95 |
| CFI | > .90 – close to .95 |

***Comparison of Hierarchical Models.*** For each of the constructs we assessed through CFA, we compared the fit of different hierarchically nested models. The most frequently used tool for testing the difference between these models is the $\chi^2_{difference}$ test (Vandenberg & Lance, 2000). The $\chi^2_{difference}$ test evaluates the statistical significance of the parameters that differentiate between two competing models (Bentler & Bonett, 1980). More specifically for each construct we compare the fit of our target model, which is a first order total disaggregated model with correlated factors (cfr. infra) with (1) an independence model; (2) a total aggregated model in which all items directly load on one factor, and (3) a second order total disaggregated model (Bagozzi & Edwards, 1998). If the $\chi^2$ of our target model is significantly lower than the $\chi^2$ of the total aggregated model then this indicates that it is valid to take into account different dimensions of the construct measured. If the $\chi^2$ does not significantly decrease when one second order factor is added to the first order target model, then it is preferred to retain the more parsimonious first order model with correlated factors.

The principal advantages of the overall model fit indices are that they evaluate the whole model and that they can indicate inadequacies not revealed by the fit of the model components. On the other hand overall fit measures can differ from the fit of components of the model. Therefore the overall fit measures should not be used in isolation from the component fit measures (Kline, 1998). We discuss these component fit measures in the subsequent section.

#### *6.4.2.3. Validity*

Since our psychological contract scales have not been used in previous research, we tested their convergent and discriminant validity based on the results of the CFA, using a number of component fit measures. Both forms of validity involve the evaluation of measures against one another instead of against an external criterion and they are central to the evaluation of measurement models (Kline, 1998).

***Convergent validity*** refers to the intercorrelations between indicators presumed to measure the same construct. There is evidence for convergent validity if these intercorrelations are at least moderate in magnitude (Kline, 1998). For the psychological contract scales, convergent validity is assessed using the CFA results concerning the following component fit measures: (1) standardized factor loadings, (2) squared correlations between items and their constructs, and (3) average variance extracted for each construct. The factor loadings are interpreted as standardized regression coefficients that estimate the direct effects of the factors on the indicators. Kline (1998)

recommends that these loadings should exceed .50. The square of the factor loading equals the variance explained by the factor. The average of squared factor loadings for all items loading on one factor is referred to as the average variance explained by that factor (Kline, 1998).

***Discriminant validity*** refers to the intercorrelations between indicators that are supposed to measure different constructs. These should not be excessively high (Kline, 1998). It was examined by calculating the correlations between the psychological contract dimensions. This was done separately for each of the facets of employer inducements and employee contributions. We tested whether the correlations among the dimensions were significantly less than one. Subsequently, a stronger test for discriminant validity suggested by Fornell & Larcker (1981) was performed. This test stipulates that a scale possesses discriminant validity if the average variance extracted by the underlying construct (obtained through CFA) is larger than the shared variance (i.e. the squared intercorrelation) with other latent constructs.

Finally, we also examined the ***external validity*** or generalizability of the obtained factor structures of our psychological contract scales by comparing them with data collected from other samples. Our measure of the employer side of the psychological contract (promissory beliefs and evaluations of inducements) was compared with the results obtained from two other research projects using different research populations. The first consists of 491 more senior employees and 69 supervisors in six organizations, of which two also participated in our study[2]. The second involves a large sample of employees (n = 6044) representing diverse profit and non-profit sectors and different functional groups[3]. Our measure of the employee side of the psychological contract (perceptions of employee contributions) was compared with the results obtained from a study among a sample of 820 graduate students (psychology, economics and business students from all universities in Flanders)[4].

### 6.4.3. Overview of Constructs Measured at each Data Collection Wave

In order to examine the relationships delineated in our conceptual model, five questionnaires were constructed for use in each of the five data collection waves. These questionnaires include groups of items that refer to each of the constructs pointed out in the model. The time-invariant antecedent variables and socio-demographic characteristics were measured at the first wave (T0). The psychological contract and information seeking variables were repeatedly measured in the second to fifth questionnaire. General evaluations of the employment relationship were measured at T4. In Table 6.6 we provide an overview of the constructs that were measured at each data collection wave.

[2] The measure was part of a study on *the relation and the interaction between career management practices and employee perceptions concerning career development as part of the psychological contract*, conducted within our research group under the supervision of Dirk Buyens and sponsored by the Fund of Scientific Research (2002).

[3] The measure was part of a study on the *factors affecting employees' career decisions*, conducted by Marc Buelens, Eva Cools and Ans De Vos, and sponsored by Vacature (2002).

[4] The measure was part of a study on *graduating students' perceptions and expectations about their future employment relationship*, conducted by Dirk Buyens and Annelies Meganck (2002).

Table 6.6: Overview of Constructs Measured at Each Data Collection Wave

| | T0 | T1 | T2 | T3 | T4 |
|---|---|---|---|---|---|
| ***Time-invariant antecedents*** | | | | | |
| Work values | | | | | |
| Career strategy | | | | | |
| Locus of control | | | | | |
| Exchange ideology | | | | | |
| Equity sensitivity | | | | | |
| ***Psychological contract: employer inducements*** | | | | | |
| Perceived promises | | | | | |
| Importance of promises | | | | | |
| Inducements received | | | | | |
| Evaluation of promises | | | | | |
| ***Psychological contract: employee contributions*** | | | | | |
| Perceived promises | | | | | |
| Importance of promises | | | | | |
| Contributions made | | | | | |
| Evaluation of promises | | | | | |
| ***Psychological contract features*** | | | | | |
| Relational Psychological Contract | | | | | |
| ***Information-seeking behaviors*** | | | | | |
| Information seeking about employer inducements | | | | | |
| Information seeking about employee contributions | | | | | |
| ***General evaluation of the employment relation*** | | | | | |
| Satisfaction | | | | | |
| Met expectations | | | | | |
| ***Socio-demographic control variables*** | | | | | |
| Age | | | | | |
| Gender | | | | | |
| Level of education | | | | | |
| Prior work experience | | | | | |
| Formal employment contract | | | | | |

In what follows we will discuss each of the constructs that were included in the study. We start with the time-invariant antecedent variables (section 6.5.4), followed by the psychological contract measurements (section 6.5.5) and the measurement of information seeking (section 6.5.6), general evaluations (section 6.5.7), and socio-demongraphic control variables (section 6.5.8).

### 6.4.4. Time-Invariant Antecedent Variables

In Chapter 3 we have discussed four types of individual antecedents for which we propose a relationship with the psychological contract exists. These antecedents have been measured at organizational entry (T0). We call them *time-invariant* within the context of this study since these antecedent variables are measured only once and because it is not our objective to model the evolution in these constructs over the first year of employment (Chan, 1998). The following constructs have been measured: *work values* (section 6.4.4.1), *career strategy* (section 6.4.4.2), *locus of control* (6.4.4.3), and *exchange orientation* (6.4.4.4). The operationalization of these constructs and the selection of measurement scales is based on our review of relevant literature (cf. Chapter 3). Existing scales that have proven to be valid and reliable in previous studies have been selected.

#### *6.4.4.1. Work Values*

The literature contains a large number of instruments developed to measure work values (e.g. Elizur *et al.*, 1991; Ross *et al.*, 1999; Schein, 1978; 1993; Super, 1995; Super *et al.*, 1985; Sverko & Super, 1995). After an extensive study of existing measurements we decided to use the instrument of the Work Importance Study (WIS)

and more specifically the adapted Flemish version of this instrument, developed by Coetsier & Claes (1990). The WIS instrument was initially developed by researchers from 14 different countries. The final instrument has much in common with earlier instruments developed by Super (Super *et al.*, 1985: The Salience Inventory; The Values Scale).

The original Flemish version contains 105 items which are assumed to load on 21 value scales. Buyens (1993) reduced this large number to 44 items loading on 10 value scales (creativity, advancement, altruism, authority, autonomy, economical rewards, life style, prestige, social relations, economical security, work-life balance). The tenth scale (work-life balance) has been added by Buyens (1993). According to the analyses by the initial authors (Coetsier & Claes, 1990), these scales should load on four higher order factors or dimensions: (1) *advancement,* (2) *autonomy,* (3) *economic rewards,* and (4) *group-orientedness.*
In our study we used the 44 items selected by Buyens (1993). For each of these items, subjects had to indicate how important each statement is to them by circling the corresponding number on a five-point Likert scale ranging from (1) = "not at all important" to (5) = "to a great extent important". This instruction was the same as the instruction used by the initial authors and by Buyens (1993) except that they used four-point Likert scales. We decided to use five-point Likert scales for reasons of consistency with the other scales in our questionnaires.

Within the scope of the hypotheses tested in this thesis, we only worked with the four higher order factors as they have been defined by Coetsier & Claes (1990: 55). ***Advancement*** is measured by 18 items. The Cronbach Alpha reliability of this scale is .82. ***Autonomy*** is measured by 5 items and has a Cronbach Alpha reliability of .70. Six items load on the value ***Economic rewards*** (Cronbach Alpha = .79) and 8 items load on the value ***Group orientedness*** (Cronbach Alpha = .76). The items belonging to these four scales are represented in Table 6.7.

Table 6.7: Overview of Final Scales and Items Used to Measure the Time-Invariant Antecedent Variables[1]

| WORK VALUES |
|---|
| **Advancement ($\alpha$ = .82)** |
| To have a job in which you can use your capacities |
| To develop your skills and knowledge in you job |
| To continuously learn new things at work |
| To reach a high level in the content of your work |
| To perform better than others |
| To make progress in your career |
| To get ahead |
| To make promotion |
| To be a leader at work |
| To take decisions that are implemented by others |
| To influence other people |
| To create something new in your work |
| To try out new ideas at work |
| To make your own career |
| To realize your personal goals |
| To be recognized for your achievements |
| To be strongly appreciated for your work |
| To be perceived as someone special |
| **Autonomy ($\alpha$ = .70)** |
| To do things your own way |
| To make your own decisions at work |
| To choose your own working hours |
| To live according to your own ideas |
| To decide for your own what you will do with your life |

| |
|---|
| **Economic Rewards (α = .79)** |
| To have a good salary |
| To be well-paid for whatever kind of job you would do |
| To earn money |
| To have a job that provides steady employment |
| To have your income secured |
| To have your standard of living secured |
| **Group Orientedness (α = .76)** |
| To help people with problems |
| To be involved in work aimed at helping other people |
| To have a job that serves other people |
| To work in group rather than alone |
| To have people around you who have time for a chat |
| To have colleagues that are easy to make friends with |
| To be together with people of your sort |
| To have a job in which you can easily make friends |
| **LOCUS OF CONTROL (α = .78)** |
| I determine for myself what matters to me in my career |
| The course of my career depends on my own efforts |
| My success in my career depends on my competencies and hard work |
| Any promotion I receive in the organization will be due to my own abilities |
| I determine for myself what will happen to me in my career |
| My success in the organization is determined by senior people (*R*) |
| Being liked by seniors influences my chances for promotion (*R*) |
| Receiving a promotion depends on being in the right place at the right time (*R*) |
| Preferences of seniors determine whether I will make promotion (*R*) |
| My career depends on my seniors (*R*) |
| The way my career will evolve is a matter of chance (*R*) |
| My success or failure in my career is a matter of luck (*R*) |
| My success or failure in my career depends on those with whom I work (*R*) |
| The success I have in my career depends on the chances I get (*R*) |
| The organization or job I join is an accidental occurrence (*R*) |
| **CAREER STRATEGY (α = .67)** |
| I really wanted a job with this particular employer |
| I do not expect to change organizations often during my career |
| There are many career opportunities I expect to explore after I leave my present employer |
| I am really looking for an organization to spend my entire career with |
| I specifically set out to get a position with this organization |
| **EXCHANGE ORIENTATION** |
| **Exchange Ideology (α = .72)** |
| An employee's work effort should depend on how well the organization deals with his or her desires and concerns |
| An employee who is treated badly by the organization should lower his or her work effort |
| How hard an employee works should not be affected by how well the organization treats him or her (*R*) |
| An employee's work effort should have nothing to do with the fairness of his or her pay (*R*) |
| The failure of the organization to appreciate an employee's contribution should not affect how hard he / she works (*R*) |
| **Equity Sensitivity (α = .73)** |
| An employee's work effort should in the first place benefit: himself --- the organization |
| An employee should in the first place be concerned: for himself --- for the organization |
| An employee should in the first place realize: his own goals --- the organization's goals |

[1]All scores were on five-point scales

### *6.4.4.2. Career Strategy*

The measurement of career strategy is based on Rousseau's (1990) measurements of *careerism* and *preference for employer*. Using a 1 to 5 point Likert scale, participants had to indicate to which extent they agree with each of six statements referring to their preference for changing employers frequently during their careers (4 items) and to their preference for working with their current employer (2 items) (1 = strongly disagree – 5 = strongly

agree). Since we had no theoretical arguments for retaining a conceptual distinction between both measures, we collapsed the 6 items into one overall measure of career strategy. Two items were reverse-scored such that a higher score on this scale is indicative of a more local career strategy (i.e. a strategy of developing one's career within the current organization). Coefficient alpha of this overall measure was .64 and it increased to .67 when the first item was excluded from the scale. See Table 6.7 for an overview of the five items retained to measure career strategy.

#### *6.4.4.3. Locus of Control*

In this study we used an adapted version of the locus of control scaled originally developed by Levenson (1974; 1981). This scale measures three types of locus of control: Internal LOC (I scale), External LOC – Powerful Others (P scale), and External LOC – Chance (C scale). The I scale measures the extent to which people believe that they have control over their own lifes; the P scale deals with powerful others; and the C scale is concerned with perceptions of chance control.

The original scale developed by Levenson consists of 24 items (8 items for each sub-scale). We adapted these items to the work situation and presented them to the subjects of our second pilot test (cf. section 6.4.1). Based on EFA, examination of factor loadings and cross-loadings, and reliability analysis, 15 items were selected to be included in the final questionnaire. Respondents had to indicate to which extent they agree with each of the 15 statements using a 5-point Likert scale ranging from (1) = "not at all" to (5) = "to a very great extent". High scores on each sub-scale indicate high expectations of control by the source designated. Low scores reflect tendencies *not* to believe in that source of control (Levenson, 1981).

The Cronbach Alpha's for the three LOC scales were moderate: .63 for Internal LOC, .66 for External LOC – Chance and .73 for External LOC – Powerful Others. These reliabilities correspond wit the original reliabilities reported by Levenson (1974) but they are lower than what has been found in other research using these scales (e.g. Tang *et al.*, 1997) and than what we found in our pilot study and in another study recently conducted within our research group (Buyens *et al.*, 2002). For theoretical reasons (we had not made any dimension-specific hypotheses) and in view of the rather low reliability of the LOC-I and LOC-E:C scales, we reverse-scored the 10 items loading on both external LOC scales and collapsed them, together with the items of the internal LOC scale, into 1 overall measure of LOC. A higher score on this scale thus refers to a higher degree of internal LOC. Alpha reliability of this scale was .78. The items used to measure LOC are represented in Table 6.7.

#### *6.4.4.4. Exchange Orientation*

***Exchange Ideology*** was measured using the scale originally developed by Eisenberger *et al.* (1986). The scale consists of five statements assessing individuals' normative perceptions of reciprocity and balance in exchange relationships. Respondents were provided with a 5-point scale ranging from (1) = "not at all" to (5) = "to a very great extent" along with the 5 items. After reversed-scoring of 3 items, a composite score for Exchange Ideology was calculated. A higher score indicated a stronger degree of exchange ideology. Alpha reliability for this scale was .72.

***Equity sensitivity.*** To measure equity sensitivity, three items were selected from the Equity Sensitivity Scale initially developed by Huseman *et al.* (1985). A 5-point bipolar scale was used to measure subjects' preferences for inputs and outputs in a general work situation. For example: "An employee's work efforts should in the first place (1) = "benefit himself/herself" – (3) = "benefit himself/herself and the organization equally" - (5) = "benefit the organization". A composite score was calculated for the 3 items such that a higher score indicates a higher preference for benefiting the organization (= Benevolent response). Alpha reliability for this scale was .73. Table 6.7 contains the items belonging to both scales.

### 6.4.5. Psychological Contract Content and Evaluation

Because no generally agreed-upon measure of the psychological contract exists within the literature, we decided to develop a new measure for this study. This decision was based on several arguments. In addition to the lack of a standard psychological contract scale, there is much variability in existing scales with respect to (a) the operationalization of the instruction; (b) the use of content dimensions to measure both promissory beliefs and evaluations of promises; (c) the measurement of contributions of both parties to the employment relationship, i.e. employer and employee. We have extensively discussed these shortcomings in Chapter 2. In developing our own measurement we have taken these criticisms into account. First, we describe the procedure followed to generate and select a list of items for measuring the content and evaluation of the psychological contract (6.4.5.1).Next, we discuss our operationalization of the instructions for measuring promissory beliefs (6.4.5.2) and evaluations of promises (6.4.5.3).

#### *6.4.5.1. Selection of Items to Measure Employer Inducements and Employee Contributions*

In this section we elaborate in more detail on the procedures we followed to develop our psychological contract scales (content of promissory beliefs and psychological contract evaluation). We have already described these procedures at a more general level in section 6.4.1. This procedure consisted of four steps, which will be successively described here: (1) item generation; (2) item selection and scale construction based on pilot study results; (3) final item selection and scale construction based on T1 and T2 data of our longitudinal study; and (4) confirmatory assessment of factor structure based on T3 data of our longitudinal study.

Step 1: Item Generation

To generate a list of employer inducements and employee contributions we screened all existing instruments and compared the items used in these instruments and the content areas to which they referred. We have already discussed the results of this review in Chapter 2 (section 2.2.2). Our focus was on the type of inducements and contributions that were measured in these scales. We thereby took into account scales that measured the content of the psychological contract (in terms of perceived promises or expectations) as well as those scales measuring the evaluation of the psychological contract that took into account different content dimensions at the item or component level. We hereby looked at scales developed to measure employees' view on the psychological contract as well as scales developed to measure the employer's view. The items measuring employer inducements were selected based on measures developed by Coyle-Shapiro & Kessler (1998; 2000a; 2000b; 2000c), Freese & Schalk (1996; 1999), Freese *et al.* (1999), Guest & Conway (1997; 1998), Guest *et al.* (1998; 1999), Herriot *et al.* (1997), Ho (1999), Millward & Brewerton (1999), Millward & Hopkins (1998), Rousseau (1990), and Rousseau (1998b). The items measuring employee contributions were selected based on measures developed by Herriot *et al.* (1997), Freese *et al.* (1999), and Rousseau (1990; 1998b).

Step 2: Item Selection and Scale Construction Based on Pilot Study Results

We compared all items and after the exclusion of overlapping items we presented a list of 78 items to the subjects of our second pilot study. There were 42 items used to tap employer inducements being part of the psychological contract and 36 items to tap employee contributions. For the ***employer inducements***, based on our literature review we expected that these items would load on six components, i.e. *career development, job content, social atmosphere, financial rewards, personal support, and work-life balance.* For ***employee contributions*** we expected that there would be six underlying components on which these items would load: *job performance, extra-role behavior, ethical behavior, loyalty, flexibility and employability.* These components correspond with the content dimensions of the psychological contract we have discussed in Chapter 2. In total 117 subjects participated in this pilot study. These were all graduate students from two universities and one business school located in Flanders who had almost finished their studies and who had already signed for a job in which they would start after their graduation. Subjects were asked to indicate the extent to which their future employer had implicitly or explicitly *promised* them each of the 42 inducements and the *importance* they attached to these inducements. Secondly they had to indicate the extent to which they had made promises to their

future employer, implicitly or explicitly, about the 36 employee contributions and the importance they attached to these contributions.

We conducted exploratory factor analysis (principal components analysis) to assess if the factor structure corresponded with the expected factor structure. This was done separately for the items measuring employer inducements and those measuring employee contributions and for the question about perceived promises versus importance. This means that in total four factor analyses were conducted.

For ***employer inducements*** the initial number of components that emerged from the PCA on the measure of *perceived promises* was eight. However, the seventh and eighth component had no substantive meaning, while the other six components corresponded with the six dimensions we had expected. The items measuring *importance* of employer inducements initially loaded on 13 different components. Based on the factor loadings, reliability analyses and comparison of the results for the two types of operationalizations (perceived promises and importance of inducements) we retained 25 items for inclusion in the final questionnaire. Five content dimensions (job content, career development, financial rewards, personal support, work-life balance) were each measured by four items, while five items were retained to measure the sixth dimension (social atmosphere).

For ***employee contributions*** the factor structure was less clear and did not correspond with what we had expected. The number of factors extracted based on the measurement of *perceived promises* corresponded with the number of dimensions we had expected but their interpretation based on the items with high factor loadings did not correspond with the content of our theoretically defined dimensions. The items which we expected to load on two different dimensions, namely job performance and extra-role behavior, loaded on one factor, while items expected to measure flexibility loaded on two separate dimensions, one referring to functional flexibility and the other to flexibility in working hours. Reliability analysis based on the obtained factor structure (taking into account those items with loadings >.40 without cross-loadings >.40) did not result in satisfying reliabilities for all scales. For the items measuring the *importance* of employee contributions the varimax rotation failed to converge into a simple structure. Also the Alpha reliabilities based on the a priori expected dimensions (both with respect to promises and to importance), turned out to be insufficient for most dimensions. We compared our results with existing scales in the literature measuring the employee side of the psychological contract and used this information, together with the results of our pilot study, to retain 30 of the 36 originally selected items for inclusion in the final questionnaire. Six items that had no strong loading on any component were withdrawn.

We subsequently discussed our items and the results of our factor analyses with a group of sixteen young professionals who participated in a summer school on management skills in July 2000. They filled out the questionnaire and gave their comments on item selection and wordings. Based on the information obtained from the EFAs and the discussion with this group of young professionals we made some adaptations to the original wordings. Subsequently, the adapted questionnaire was presented to four academic experts and to the HR-representatives of the organizations participating in the main study. Based on their comments, some minor adaptations were made in the final questionnaire. For the final questionnaire, 25 items were retained to tap six dimensions of employer inducements, and 30 items were retained referring to six dimensions of employee contributions.

Step 3: Final Item Selection and Scale Construction Based on Longitudinal Study (T1 and T2 Data)

The structure, reliability and validity of the items and scales we selected for inclusion in our longitudinal study were empirically evaluated a second time based on the data we collected in our longitudinal study. We decided to conduct another exploratory factor analysis on the list of employer inducements and employee contributions for two reasons. First, the results of our pilot study were not unequivocal with respect to the factor structure and reliability of both inducements and contributions. Since this is a newly developed scale we decided that it would be more informative to first study the factor structure that emerged from the data without making a priori specifications about it. Given the longitudinal nature of the study and the use of repeated measures this offered

us the opportunity to subsequently validate the obtained factor structure through CFA in the subsequent data collection wave. Second, given the characteristics of the sample on which we conducted our pilot study (graduates who have not effectively started in their new job), we could not test for the factor structure of the scales measuring the evaluation of the psychological contract. This could only be done for the first time at the third data collection wave (T2) of our longitudinal study.

Thus, the scales measuring *perceived promises* and *importance* of employer inducements and employee contributions were subjected to EFA at T1, and the scales measuring *actual experiences and perceived fulfillment of promises* were subjected to EFA at T2, i.e. the first time they were measured. For both the list of employer inducements and the list of employee contributions, we compared the obtained factor structures and reliability data for these four operationalizations and based on these comparisons the final scales were constructed. These scales were subsequently verified through CFA and reliability analysis at T3 and through reliability analysis at T4.

Based on the EFAs at T1 and T2 and the comparisons between operationalizations, we retained 19 items referring to five content dimensions of employer inducements and 19 items referring to five content dimensions of employee contributions. For employer inducements, the items used to operationalize the dimension "personal support" were withdrawn since this factor did not emerge from the EFAs in a consistent way and Alpha reliabilities were too low. For employee contributions, the items that were expected to load on two separate dimensions, i.e. "job performance" and "extra-role behavior" had to be collapsed into one scale based on the empirical data, reducing the proposed number of dimensions from six to five. We called this factor "in & extra role behavior". The final list of items is represented in Table 6.8.

Step 4: Confirmatory Assessment of Factor Structure Based on Longitudinal Study (T3 Data)

We subsequently evaluated the proposed factor structure based on our T3 data, using confirmatory factor analysis. In addition to the proposed models with five first order factors (for the four operationalizations of employer inducements and for the four operationalizations of employee contributions), we evaluated three alternative models. *Model 1* is the independence model specifying that no latent factors underlie the observed variables and that the correlations between items are zero in the population; *Model 2* is the total disaggregated model with one first order factor; *Model 3* is our target model and thus specifies five correlated first order factors (first order total disaggregated model); *Model 4* is the second order total disaggregated model with five first order factors and one second order factor (Bagozzi & Edwards, 1998). All models were specified to represent unidimensional construct measurement and uncorrelated measurement errors (Anderson & Gerbin, 1988).

Table 6.8: Overview of Final Items Used in the Psychological Contract Scales[1]

| EMPLOYER INDUCEMENTS |
|---|
| ***Career Development*** |
| 1. Opportunities for promotion |
| 3. Opportunities for career development within this organization |
| 6. Opportunities to grow |
| ***Job Content*** |
| 2. A job in which you can make decisions by yourself |
| 7. Opportunities to show what you can |
| 10. A job with responsibilities |
| 20. Opportunities to use your skills and capacities |
| ***Social Atmosphere*** |
| 4. A good atmosphere at work |
| 9. Positive relationships between colleagues |
| 13. A good mutual cooperation |
| 25. A good communication among colleagues |
| ***Financial Rewards*** |
| 11. Financial rewards for exceptional performance |
| 16. Wage increases based on your performance |
| 18. An attractive pay and benefits package |
| 23. Regular benefits and extras |
| ***Work-Life Balance*** |
| 12. Respect for your personal situation |
| 15. Opportunities for flexible working hours depending on your personal needs |
| 17. The opportunity to decide for yourself when you take your vacation |
| 22. A flexible attitude concerning the correspondence between your work and private life |
| **EMPLOYEE CONTRIBUTIONS** |
| ***In & Extra Role Behavior*** |
| 2. Work fast and efficiently |
| 3. Cooperate well with your colleagues |
| 7. Assist your colleagues in their work |
| 8. Deliver qualitative work |
| 10. Share information with your colleagues |
| 19. Get along with your colleagues |
| ***Flexibility*** |
| 1. Work extra hours to get your job done |
| 6. Take work home regularly |
| 25. Volunteer to do tasks that are strictly no part of your job if necessary |
| 26. Work during the weekend if necessary |
| ***Ethical Behavior*** |
| 11. Protect confidential information about the company |
| 12. Use the organization's properties honestly |
| 20. Use the resources you receive from the organization honestly (materials, budgets) |
| 22. Follow the policies and norms of the organization |
| ***Loyalty*** |
| 14. Accept no job offers you receive from other organizations |
| 16. Not immediately look for a job elsewhere |
| 23. Remain with this organization for at least some years |
| ***Employability*** |
| 17. Participate in training courses outside your working hours |
| 24. Take personal initiative to follow additional training courses |

[1] Item numbers refer to the original item numbers in the questionnaires

***Overall model fit.*** The goodness-of-fit indices for each of the estimated models and for each psychological contract scale are summarized in Table 6.9. Following the procedure described in section 6.4.2.2, for each of the models tested we first checked for the existence of *offending estimates* like negative error variances and

standardized coefficients exceeding 1.0 (Bollen, 1989; Kline, 1998). None of the estimated parameters had unacceptable values, so we could proceed with the evaluation of the overall goodness-of-fit of the estimated models.

Table 6.9: Overall Model Fit for CFA of Psychological Contract Scales

| Model | $\chi^2$(df) | $\chi^2$/df | $\chi^2\Delta$ (df) | RMSEA | CFI | TLI |
|---|---|---|---|---|---|---|
| **PERCEIVED PROMISES ABOUT EMPLOYER INDUCEMENTS** | | | | | | |
| M1: Independence model | 30630.325** (190) | 161.212 | | .555 | - | - |
| M2: 1 first order factor | 1998.766** (152) | 13.150 | | 153 | .939 | .924 |
| **M3: 5 first order factors** | **404.284** (142)** | **2.847** | | **060** | **.991** | **.988** |
| M4: 5 first order factors 1 second order factor | 513.485** (147) | 3.493 | 109.201** (5) | 069 | .988 | .984 |
| **IMPORTANCE OF EMPLOYER INDUCEMENTS** | | | | | | |
| M1: Independence model | 38129.318** (190) | 200.681 | | .620 | - | - |
| M2: 1 first order factor | 2684.191** (152) | 11.572 | | .143 | .958 | .947 |
| **M3: 5 first order factors** | **402.946** (142)** | **2.838** | | **.059** | **.993** | **.991** |
| M4: 5 first order factors 1 second order factor | 499.126** (147) | 3.395 | 96.180** (5) | .068 | .991 | .988 |
| **EMPLOYER INDUCEMENTS RECEIVED** | | | | | | |
| M1: Independence model | 30906.172** (190) | 162.664 | | .558 | - | - |
| M2: 1 first order factor | 2186.458** (152) | 17.659 | | .179 | .918 | .897 |
| **M3: 5 first order factors** | **455.019** (142)** | **3.204** | | **.065** | **.990** | **.986** |
| M4: 5 first order factors 1 second order factor | 543.912** (147) | 3.700 | 88.893** (5) | .072 | .987 | .983 |
| **PERCEIVED FULFILLMENT OF EMPLOYER PROMISES** | | | | | | |
| M1: Independence model | 31127.630** (190) | 163.830 | | .560 | - | - |
| M2: 1 first order factor | 2186.458** (152) | 14.385 | | .160 | .934 | .918 |
| **M3: 5 first order factors** | **341.891** (142)** | **2.408** | | **.052** | **.994** | **.991** |
| M4: 5 first order factors 1 second order factor | 389.313** (147) | 2.648 | 47.422** (5) | .056 | .992 | .990 |
| **PERCEIVED PROMISES ABOUT EMPLOYEE CONTRIBUTIONS** | | | | | | |
| M1: Independence model | 27537.144** (190) | 144.932 | | .526 | - | - |
| M2: 1 first order factor | 1665.265** (153) | 10.956 | | .138 | .945 | .931 |
| **M3: 5 first order factors** | **406.694** (142)** | **2.864** | | **.060** | **.990** | **.987** |
| M4: 5 first order factors 1 second order factor | 491.791** (147) | 3.346 | 85.097** (5) | .067 | .987 | .984 |
| **IMPORTANCE OF EMPLOYEE CONTRIBUTIONS** | | | | | | |
| M1: Independence model | 32692.522** (190) | 172.066 | | .574 | - | - |
| M2: 1 first order factor | 1667.202** (153) | 10.968 | | .138 | .953 | .942 |
| **M3: 5 first order factors** | **420.980** (142)** | **2.695** | | **.061** | **.991** | **.986** |
| M4: 5 first order factors 1 second order factor | 507.440** (147) | 3.452 | 86.460** (5) | .069 | .989 | .989 |
| **EMPLOYEE CONTRIBUTIONS MADE** | | | | | | |
| M1: Independence model | 3227.900** (190) | 169.852 | | .570 | - | - |
| M2: 1 first order factor | 1759.596** (153) | 11.501 | | .142 | .950 | .938 |
| **M3: 5 first order factors** | **461.768** (142)** | **3.252** | | **.066** | **.990** | **.985** |
| M4: 5 first order factors 1 second order factor | 527.055** (147) | 3.858 | 65.287** (5) | .071 | .988 | .987 |
| **PERCEIVED FULFILLMENT OF EMPLOYEE CONTRIBUTIONS** | | | | | | |
| M1: Independence model | 37086.240** (190) | 195.101 | | .611 | - | - |
| M2: 1 first order factor | 1392.682** (153) | 9.162 | | .125 | .966 | .958 |
| **M3: 5 first order factors** | **409.519** (142)** | **2.884** | | **.060** | **.993** | **.990** |
| M4: 5 first order factors 1 second order factor | 461.860** (147) | 3.142 | 52.341** (5) | .064 | .991 | .989 |

** $p < .01$

As shown in Table 6.9, for each scale the independence model (Model 1) provides a poor fit to the data. The specification of one first order factor (Model 2) leads to a substantial improvement in model fit compared with the independence model, but it still indicates insufficient fit with the sample data. Although the $\chi^2$ statistic of all models is significant ($p < .001$), this could be expected due to the large sample size (Hu & Bentler, 1999; Kline, 1998; Vandenberg & Lance, 2000). For Model 3 and Model 4, the ratio of $\chi^2$ to degrees of freedom is always situated within the acceptable range and it is always lower than for the first two models. The other fit indices also indicate a better model fit for Model 3 and Model 4 compared with the first two models: the RMSEA index is always lower than .08 and the CFI and TLI indices are always higher than .95. Comparing Model 3 and Model 4 (which are nested models), the specification of one second order factors always leads to a significant decrease in model fit, but the overall model fit indices are still within acceptable ranges. Since our theoretical interest is in the multidimensional nature of the psychological contract we will continue working with Model 3 but for some analyses with composite scales the model fit results for Model 4 indicate that this is justified.

***Assessment of the measurement model.*** Given an adequate fit of the proposed five-dimensional models we evaluated the measurement model (Model 3) to further assess the psychometric properties of the psychological contract scales. The measurement models are presented in Table 6.10a (scales measuring employer inducements) and Table 6.10b (scales measuring employee contributions). In these tables, for each dimension of employer inducements and each dimension of employee contributions the following parameters are reported: standardized factor loadings, standardized errors, and squared factor loadings. These parameters give us an indication of the ***convergent validity*** of the scales.

Table 6.10a: Measurement Model for the First-Order Factor Model: Employer Inducements

| | Inducements Promised | | | Importance of Inducements | | | Inducements Received | | | Fulfillment of Promises | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Loading | S.E. | $R^2$ | Loading | S.E. | $R^2$ | Loading | S.E. | $R^2$ | Loading | S.E. | $R^2$ |
| **Career Development** | | | | | | | | | | | | |
| 1[a] | .792** | | .627 | .719** | | .516 | .762** | | .581 | .626** | | .392 |
| 3 | .843** | .044 | .684 | .728** | .059 | .646 | .847** | .051 | .594 | .786** | .109 | .599 |
| 6 | .827** | .043 | .711 | .803** | .062 | .530 | .771** | .052 | .718 | .774** | .108 | .617 |
| **Job Content** | | | | | | | | | | | | |
| 2[a] | .478** | | .228 | .557** | | .310 | .668** | | .446 | .636** | | .404 |
| 7 | .716** | .162 | .513 | .713** | .110 | .509 | .835** | .077 | .697 | .837** | .098 | .700 |
| 10 | .611** | .151 | .373 | .679** | .113 | .461 | .766** | .081 | .587 | .772** | .093 | .596 |
| 20 | .764** | .165 | .584 | .629** | .099 | .396 | .832** | .076 | .692 | .818** | .091 | .668 |
| **Social Atmosphere** | | | | | | | | | | | | |
| 4[a] | .773** | | .598 | .733** | | .538 | .851** | | .723 | .798** | | .636 |
| 9 | .873** | .051 | .763 | .836** | .068 | .699 | .860** | .038 | .740 | .890** | .045 | .791 |
| 13 | .746** | .048 | .557 | .646** | .064 | .417 | .800** | .037 | .641 | .786** | .042 | .617 |
| 25 | .867** | .053 | .751 | .810** | .066 | .656 | .822** | .039 | .676 | .818** | .044 | .669 |
| **Financial Rewards** | | | | | | | | | | | | |
| 11[a] | .647** | | .418 | .787** | | .619 | .774** | | .599 | .789** | | .623 |
| 16 | .654** | .089 | .428 | .716** | .052 | .512 | .730** | .067 | .533 | .634** | .062 | .402 |
| 18 | .595** | .071 | .354 | .646** | .046 | .417 | .564** | .052 | .319 | .577** | .066 | .333 |
| 23 | .601** | .082 | .361 | .694** | .063 | .481 | .656** | .060 | .430 | .620** | .066 | .385 |
| **Work-Life Balance** | | | | | | | | | | | | |
| 12[a] | .798** | | .637 | .734** | | .539 | .760** | | .578 | .781** | | .610 |
| 15 | .543** | .066 | .295 | .616** | .074 | .380 | .695** | .072 | .482 | .721** | .062 | .519 |
| 17 | .565** | .061 | .319 | .571** | .067 | .327 | .521** | .063 | .272 | .547** | .053 | .299 |
| 22 | .817** | .059 | .667 | .760** | .072 | .577 | .875** | .068 | .765 | .845** | .057 | .715 |

[a] reference item (factor loading fixed to one)

** $p < .01$

The convergent validity is supported because all standardized factor loadings are significant ($p < .01$), and most of them are higher than .50 (Kline, 1998). Only for some items of employee contributions the factor loadings are smaller than .50.

Table 6.10b: Measurement Model for the First-Order Factor Model: Employee Contributions

| | Contributions Promised | | | Importance of Contributions | | | Contributions Received | | | Fulfillment of Promises | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Loading | S.E. | $R^2$ | Loading | S.E. | $R^2$ | Loading | S.E. | $R^2$ | Loading | S.E. | $R^2$ |
| **In & Extra Role Behavior** | | | | | | | | | | | | |
| 2 | .730** | .054 | .532 | .707** | .062 | .499 | .710** | .081 | .504 | .636** | .069 | .405 |
| 3 | .641** | .055 | .411 | .571** | .060 | .326 | .511** | .085 | .261 | .545** | .073 | .297 |
| 7 | .729** | .061 | .532 | .627** | .077 | .393 | .577** | .097 | .333 | .589** | .076 | .347 |
| 8 | .614** | .048 | .377 | .644** | .057 | .415 | .522** | .075 | .272 | .627** | .069 | .393 |
| 10[a] | .759** | | .577 | .715** | | .511 | .656** | | .431 | .707** | | .500 |
| 19 | .761** | .062 | .579 | .693** | .068 | .480 | .644** | .085 | .415 | .622** | .068 | .387 |
| **Flexibility** | | | | | | | | | | | | |
| 1 | .507** | .087 | .257 | .527** | .073 | .278 | .519** | .077 | .269 | .484** | .082 | .235 |
| 6 | .653** | .095 | .426 | .534** | .096 | .285 | .753** | .114 | .566 | .576** | .099 | .332 |
| 25 | .675** | .090 | .318 | .613** | .081 | .376 | .305** | .062 | .093 | .534** | .085 | .285 |
| 26[a] | .564** | | .455 | .600** | | .360 | .622** | | .387 | .631** | | .399 |
| **Ethical Behavior** | | | | | | | | | | | | |
| 11 | .552** | .103 | .304 | .637** | .087 | .405 | .417** | .092 | .174 | .620** | .081 | .384 |
| 12 | .846** | .130 | .716 | .827** | .094 | .685 | .734** | .082 | .539 | .760** | .092 | .578 |
| 20 | .812** | .128 | .659 | .827** | .097 | .685 | .776** | .079 | .602 | .784** | .083 | .614 |
| 22[a] | .584** | | .341 | .622** | | .387 | .672** | | .452 | .623** | | .388 |
| **Loyalty** | | | | | | | | | | | | |
| 14 | .808** | .043 | .653 | .795** | .043 | .633 | .814** | .058 | .663 | .800** | .058 | .641 |
| 16 | .838** | .040 | .702 | .832** | .042 | .693 | .717** | .046 | .515 | .727** | .068 | .528 |
| 23[a] | .878** | | .771 | .875** | | .766 | .842** | | .709 | .775** | | .600 |
| **Employability** | | | | | | | | | | | | |
| 17[a] | .808** | | .652 | .837** | | .701 | .874** | | .764 | .777** | | .604 |
| 24 | .731** | .069 | .534 | .706** | .064 | .498 | .760** | .087 | .578 | .806** | .097 | .650 |

[a] reference item (factor loading fixed to zero)

** $p < .01$

***Discriminant validity***. We assessed the discriminant validity of the subscales by comparing the squared correlations between psychological contract dimensions with the average variance explained by each dimension (Fornell & Larcker, 1981). These correlations are represented in Table 6.11a (employer inducements) and Table 6.11b (employee contributions). These are the correlations among the latent constructs and they are thus corrected for attenuation due to measurement error. The diagonal elements (in italic) represent the average variance explained by the dimension.

Inspection of these tables suggests that, with the exception of employability and loyalty (Table 6.11b), the psychological contract dimensions show sufficient discriminant validity. Inspection of the correlation matrices also suggests that there is no bivariate multicollinearity since the absolute values of the correlations never exceeds .85 (i.e. squared correlation < .72) (Kline, 1998). This is an important conclusion since it provides evidence for the multidimensional nature of the psychological contract.

Table 6.11a: Squared Correlations and Average Variance Explained: Dimensions of Employer Inducements

| | Career Development | Job Content | Social Atmosphere | Financial Rewards | Work-Life Balance |
|---|---|---|---|---|---|
| | | | PERCEIVED PROMISES | | |
| **Career Development** | *.674* | | | | |
| **Job Content** | .262 | *.425* | | | |
| **Social Atmosphere** | .056 | .333 | *.667* | | |
| **Financial Rewards** | .325 | .223 | .138 | *.390* | |
| **Work-Life Balance** | .033 | .233 | .339 | .273 | *.480* |
| | | | IMPORTANCE OF INDUCEMENTS | | |
| **Career Development** | *.564* | | | | |
| **Job Content** | .480 | *.419* | | | |
| **Social Atmosphere** | .072 | .224 | *.578* | | |
| **Financial Rewards** | .278 | .263 | .159 | *.507* | |
| **Work-Life Balance** | .067 | .142 | .298 | .159 | *.456* |
| | | | INDUCEMENTS RECEIVED | | |
| **Career Development** | *.631* | | | | |
| **Job Content** | .336 | *.606* | | | |
| **Social Atmosphere** | .123 | .237 | *.695* | | |
| **Financial Rewards** | .436 | .176 | .073 | *.470* | |
| **Work-Life Balance** | .008 | .068 | .143 | .045 | *.524* |
| | | | FULFILLMENT OF PROMISES | | |
| **Career Development** | *.536* | | | | |
| **Job Content** | .448 | *.592* | | | |
| **Social Atmosphere** | .207 | .253 | *.678* | | |
| **Financial Rewards** | .338 | .176 | .096 | *.436* | |
| **Work-Life Balance** | .044 | .098 | .128 | .129 | *.536* |

Table 6.11b: Squared Correlations and Average Variance Explained: Dimensions of Employee Contributions

| | In & Extra Role Behavior | Flexibility | Ethical Behavior | Loyalty | Employability |
|---|---|---|---|---|---|
| | | | PERCEIVED PROMISES | | |
| **In & Extra Role Behavior** | *.500* | | | | |
| **Flexibility** | .358 | *.373* | | | |
| **Ethical Behavior** | .445 | .215 | *.505* | | |
| **Loyalty** | .207 | .415 | .177 | *.709* | |
| **Employability** | .171 | .526 | .160 | .367 | *.643* |
| | | | IMPORTANCE OF CONTRIBUTIONS | | |
| **In & Extra Role Behavior** | *.437* | | | | |
| **Flexibility** | .200 | *.325* | | | |
| **Ethical Behavior** | .433 | .246 | *.541* | | |
| **Loyalty** | .110 | .419 | .217 | *.697* | |
| **Employability** | .140 | .530 | .182 | .320 | *.600* |
| | | | CONTRIBUTIONS MADE | | |
| **In & Extra Role Behavior** | *.369* | | | | |
| **Flexibility** | .046 | *.329* | | | |
| **Ethical Behavior** | .405 | .025 | *.442* | | |
| **Loyalty** | .096 | .079 | .149 | *.629* | |
| **Employability** | .020 | .162 | .036 | .100 | *.671* |
| | | | FULFILLMENT OF PROMISES | | |
| **In & Extra Role Behavior** | *.388* | | | | |
| **Flexibility** | .250 | *.313* | | | |
| **Ethical Behavior** | .425 | .138 | *.491* | | |
| **Loyalty** | .133 | .215 | .157 | *.590* | |
| **Employability** | .100 | .323 | .101 | .128 | *.627* |

***Reliability.*** Based on the five-dimensional factor structures retained to represent the employer and employee side of the psychological contract, we assessed scale reliabilities (Cronbach Alpha coefficients) at each of the four data collection waves for each of the psychological contract operationalizations. These reliability coefficients are summarized in Table 6.12a (employer inducements) and Table 6.12b (employee contributions). In these tables we also give the reliabilities for the composite scales because some analyses will be conducted based on composite scales.

Table 6.12a: Overview of Alpha Reliabilities of Psychological Contract Scales: Employer Inducements

| | INDUCEMENTS PROMISED | | | IMPORTANCE OF INDUCEMENTS | | | INDUCEMENTS PROVIDED | | | FULFILLMENT OF PROMISES | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | T1 | T3 | T4 | T1 | T3 | T4 | T2 | T3 | T4 | T2 | T3 | T4 |
| Career Development | .84 | .85 | .84 | .75 | .81 | .78 | .86 | .85 | .85 | .90 | .87 | .88 |
| Job Content | .75 | .74 | .78 | .73 | .74 | .74 | .86 | .86 | .82 | .86 | .86 | .83 |
| Social Atmosphere | .87 | .89 | .91 | .81 | .84 | .83 | .86 | .90 | .88 | .77 | .90 | .91 |
| Financial Rewards | .63 | .72 | .73 | .76 | .80 | .81 | .73 | .78 | .76 | .85 | .83 | .80 |
| Work-Life Balance | .66 | .77 | .76 | .70 | .77 | .79 | .74 | .80 | .84 | .80 | .84 | .86 |
| *Composite scale* | .83 | .87 | .87 | .84 | .79 | .87 | .86 | .87 | .87 | .92 | .91 | .91 |

Inspection of these reliability coefficients shows that there is sufficient reliability of the scales at each data collection wave. Regarding employer inducements (Table 6.12a) only for the dimensions financial rewards and work-life balance, the T1 measurement of the scale referring to inducements promised is lower than .70. For employee contributions (Table 6.12b) only the dimension flexibility has several reliability coefficients lower than .70, while the T2 measure of contributions provided for the dimension ethical behavior is lower than .70. All other coefficients are higher than .70, thus indicating that the scales have acceptable reliabilities.

Table 6.12b: Overview of Alpha Reliabilities of Psychological Contract Scales: Employee Contributions

| | CONTRIBUTIONS PROMISED | | | IMPORTANCE OF CONTRIBUTIONS | | | CONTRIBUTIONS PROVIDED | | | FULFILLMENT OF PROMISES | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | T1 | T3 | T4 | T1 | T3 | T4 | T2 | T3 | T4 | T2 | T3 | T4 |
| In/Extra Role Behavior | .84 | .75 | .86 | .75 | .80 | .83 | .86 | .82 | .83 | .77 | .81 | .83 |
| Flexibility | .63 | .70 | .70 | .65 | .66 | .68 | .68 | .63 | .71 | .75 | .69 | .73 |
| Ethical behavior | .77 | .79 | .81 | .73 | .81 | .81 | .66 | .72 | .76 | .74 | .80 | .82 |
| Loyalty | .76 | .88 | .88 | .77 | .87 | .88 | .76 | .85 | .87 | .86 | .87 | .86 |
| Employability | .78 | .74 | .78 | .70 | .74 | .77 | .75 | .79 | .79 | .83 | .83 | .82 |
| *Composite scale* | .88 | .89 | .87 | .83 | .88 | .89 | .79 | .82 | .82 | .89 | .87 | .88 |

***External validity***. Finally, we assessed the external validity of our scales by calculating reliability coefficients based upon data obtained from other research samples. This is relevant in order to examine whether the evidence we obtained for the reliability of our psychological contract dimensions can be generalized to other research populations. The Alpha reliability coefficients are summarized in Table 6.13a (employer inducements) and Table 6.13b (employee contributions).

The reliabilities of the scales measuring employer inducements (Table 6.13a) are always higher than .70 and thus indicate good reliabilities. The fact that good reliabilities are obtained using these different research samples indicates that we can be confident that our findings were not sample-specific and that the proposed factor structure can be generalized to other populations (i.e. not only organizational newcomers but also more senior employees and employees from different types of organizations).

Table 6.13a: Overview of Alpha Reliabilities obtained from Other Research Samples: Employer Inducements

| | SAMPLE | | | |
|---|---|---|---|---|
| | 491 senior employees and 69 supervisors from 6 organizations | | 6044 employees from different organizations and industries | |
| | OPERATIONALIZATION | | OPERATIONALIZATION | |
| | Inducements Promised | Fulfillment of Promises | Importance of Inducements | Fulfillment of Promises |
| Career Development | .89 | .88 | .79 | .89 |
| Job Content | .80 | .81 | .71 | .86 |
| Social Atmosphere | .89 | .90 | .87 | .91 |
| Financial Rewards | .78 | .82 | .80 | .87 |
| Work-Life Balance | .81 | .86 | .76 | .83 |

Table 6.13b: Overview of Alpha Reliabilities obtained from Other Research Samples: Employee Contributions

| | SAMPLE: 820 Graduate Students |
|---|---|
| | OPERATIONALIZATION: Contributions Promised |
| In/Extra Role Behavior | .78 |
| Flexibility | .73 |
| Loyalty | .60 |
| Ethical behavior | .73 |
| Employability | .76 |

For employee contributions (Table 6.13b), the reliability for the flexibility scale is higher than most of the reliabilities we obtained within our sample, but here the reliability of the loyalty scale is only marginal, in contrast with the reliabilities for this scale obtained within our sample of newcomers. Apparently the structure of the loyalty scale is different for graduates. This could be explained by the fact that they answered the questions about contributions promised without reference to a specific employer. For the other scales these reliability coefficients are sufficient, suggesting that the proposed factor structure can be generalized to other research populations.

Summary

To sum up, based upon the information about the development of our psychological contract measures described in this section, we conclude that we have provided empirical support for the multidimensional nature of the psychological contract. The empirical evidence on the overall fit of the retained factor structure and the information about the reliability and validity of the subscales measuring employer inducements and employee contributions supports our proposition that it is relevant to take into account different content dimensions of the psychological contract. The evidence is stronger for employer inducements than for employee contributions. For employer inducements, most of the subscales we retained are closely related to content dimensions considered (implicitly or explicitly) by other psychological contract researchers and they also correspond with the factors considered to be relevant for employee retention within the human resources literature. For employee contributions it is useful to further evaluate the validity of the proposed factor structure using different research populations. However, in view of the limited attention paid to the employee side of the psychological contract within the literature, the scale we have developed provides an important first step. In the subsequent chapters we will investigate whether these different content dimensions of the psychological contract also have predictive validity.

In the next sections we describe the operationalizations we used for measuring the content of psychological contract perceptions (6.4.5.2) and evaluations (6.4.5.3).

#### *6.4.5.2. Psychological Contract Perceptions: Promissory Beliefs*

As outlined in the theoretical part of this thesis, promissory beliefs refer to the content of employees' *perceptions of the promises made by their employer about the inducements they will receive and of the promises they have made about their contributions*. Following the operationalization proposed by Coyle-Shapiro & Kessler (2001) we not only measure employees' perceptions of promises but also the importance they attach to the inducements and contributions listed. The latter provides an indication of the *salience* of promises to the employee (Coyle-Shapiro & Kessler, 2001) and makes it possible to assess the discriminant validity of the perception of promises about inducements and contributions compared with the importance attached to these inducements and contributions. A strong correlation between both would suggest that the psychological contract is not different from employees' expectations about their employment relationship as a function of what they would like to be part of their employment deal. This would imply that there is little evidence for the distinctive role of the promissory element within the psychological contract which is proposed to distinguish the construct from mere employee expectations[5].

***Perceived promises about employer inducements*** were measured by asking participants to indicate the extent to which they believe their employer has promised them, implicitly or explicitly, each of the inducements listed using a 5-point Likert scale ranging from (1) = "not at all" to (5) = "to a very great extent".
To measure the saliency of each promise, for each of the items used to measure perceived employer promises participants were asked to indicate the ***importance*** they attach to that inducement, using a 5-point Likert scale ranging from (1) = "not at all important" to (5) = "to a very great extent important".

***Perceived promises about employee contributions*** were measured by asking participants to indicate the extent to which they believe they have promised their employer, implicitly or explicitly, each of the contributions listed using a 5-point Likert scale ranging from (1) = "not at all" to (5) = "to a very great extent".
To measure the saliency of each promise, for each of the items used to measure perceived employee promises participants were asked to indicate the importance they attach to that contribution using a 5-point Likert scale ranging from (1) = "not at all important" to (5) "to a very great extent important".

In Table 6.14 we report for each dimension of employer inducements and employee contributions the correlations between employees' perceptions of promises and importance at each data collection wave.

Table 6.14: Correlations between Perceived Promises about and Importance of Inducements and Contributions at Each Data Collection Wave[1].

| | T1 | T3 | T4 |
|---|---|---|---|
| **EMPLOYER INDUCEMENTS** | | | |
| Career Development | .47 | .56 | .56 |
| Job Content | .51 | .47 | .57 |
| Financial Rewards | .44 | .40 | .45 |
| Social Atmosphere | .35 | .38 | .48 |
| Work-Life Balance | .47 | .49 | .52 |
| **EMPLOYEE CONTRIBUTIONS** | | | |
| In & Extra Role Behavior | .56 | .61 | .67 |
| Flexibility | .52 | .51 | .55 |
| Loyalty | .59 | .59 | .52 |
| Ethical Behavior | .58 | .65 | .69 |
| Employability | .64 | .65 | .70 |

[1] All correlations are significant at the $p < .001$ level

[5] Within the scope of this thesis we will not elaborate on the conceptual distinction between both. In our analyses of structural relationships in the following chapters only the measurement of perceived promises will be included.

As shown in Table 6.14, although all bivariate correlations are significant and high, they never exceed the norm of .85, proposed by Kine (1998), which indicates that the measures of perceived promises and importance have sufficient discriminant validity. Thus, in their responses our subjects tend to distinguish between what has been promised to them (or what they have promised) and what they find important inducements (or contributions) within their employment relationship. This is an important observation since it provides evidence for the distinctive nature of the psychological contract. In general the correlations are stronger for employee contributions than for employer inducements, suggesting that employees' perceived promises about their own contributions are more strongly related to the importance they attach to these contributions than their perceptions of promises about employer inducements.

#### *6.4.5.3. Psychological Contract Evaluations*

Psychological contract evaluation has also been defined and operationalized in diverse ways within the literature (see Chapter 2). In this thesis we have defined psychological contract evaluation as *employees' perceptions of the extent to which promises are actually being fulfilled.* In existing studies, two approaches exist to the measurement of psychological contract evaluation. The first approach involves an *explicit measure of perceived contract fulfillment* by asking respondents to indicate the degree to which their employer has fulfilled its promises. This method has been adopted in a number of studies (e.g. Coyle-Shapiro & Kessler, 2000; Robinson & Morrison, 1995; Robinson & Rousseau, 1994). The second approach consists of measuring *employees' actual experiences,* i.e. their perceptions of the inducements received from their organization and of the contributions made to their organization (Coyle-Shapiro & Kessler, 2000; Robinson, 1996). In accordance with Coyle-Shapiro & Kessler (2000) we use both methods in this study[6].

***Employer inducements received*** were measured by asking participants to indicate the extent to which their employer actually offers them each of the inducements listed using a five-point Likert scale ranging from (1) = "not at all" to (5) = "to a great extent".
***Perceived fulfillment of employer promises*** was measured by asking participants to indicate the extent to which they believe their organization fulfills its initial promises using a 5-point Likert scale ranging from (1) = "promise not at all fulfilled" to (5) = "promise exceeded". In addition to this, respondents could also circle the alternatives "promise never made" (0) or "too soon to evaluate" (9). These were regarded as non-response in later analyses.

***Employee contributions*** were measured by asking participants to indicate the extent to which they actually provide their employer each of the contributions listed using a five-point Likert scale ranging from (1) = "not at all" to (5) = "to a great extent".
***Perceived fulfillment of employee promises*** was measured by asking participants to indicate the extent to which they believe they fulfill their initial promises using a 5-point Likert scale ranging from (1) = "promise not at all fulfilled" to (5) = "promise exceeded". In addition to this, respondents could also circle the alternatives "promise never made" (0) or "too soon to evaluate" (9). Again, both responses were treated as missing values in later analyses.

In Table 6.15 we summarize for each type of inducements and contributions the correlation between the measure of actual experiences and of promise fulfillment at each data collection wave.

[6] Following this second approach, some authors subsequently calculate a discrepancy measure that assesses the gap between what is promised and what is provided. However, in view of the problems inherent in using difference scores (see e.g. Edwards, 1994a; 1994b) this will not be done for this study. Within the scope of this thesis we will not further elaborate on the conceptual distinction between the evaluation of promises and actual experiences but both measures will be used to analyze psychological contract development in Chapter 8.

Table 6.15: Correlations between Evaluation of Promises and Perception Actual Experiences at Each Data Collection Wave[1].

| | T1 | T3 | T4 |
|---|---|---|---|
| **EMPLOYER INDUCEMENTS** | | | |
| Career Development | .66 | .61 | .75 |
| Job Content | .77 | .79 | .76 |
| Financial Rewards | .76 | .79 | .81 |
| Social Atmosphere | .49 | .59 | .65 |
| Work-Life Balance | .72 | .75 | .80 |
| **EMPLOYEE CONTRIBUTIONS** | | | |
| In & Extra Role Behavior | .59 | .56 | .60 |
| Flexibility | .44 | .45 | .50 |
| Loyalty | .62 | .61 | .60 |
| Ethical Behavior | .57 | .56 | .62 |
| Employability | .65 | .67 | .59 |

[1] All correlations are significant at the $p < .001$ level

As can be seen from Table 6.15, these correlations are stronger for employer inducements than for employee contributions. This means that the respondents in our sample tend to relate their perception of inducements received from their organization more strongly to their evaluation of promise fulfillment than they do with respect to their perceptions of their own contributions. Although all correlations are high and significant at the $p < .001$ level they suggest sufficient discriminant validity since they are all smaller than .85 (Kline, 1998). This observation suggests that, although they correlate to a large extent, the perception of actual experiences and the evaluation of promise fulfillment can be considered as distinctive aspects of psychological contract evaluation.

### 6.4.6. Psychological Contract Features

Psychological contract features have been measured at T1, T2, T3 and T4. They refer to employees' perceptions of the *general characteristics of their employment relationship, without reference to specific employer inducements or employee contributions*. Our measure of psychological contract features included seven items originally used by Freese & Schalk (1996) and seven items developed by Millward & Hopkins (1998). These items refer to the dimensions of psychological contract features we have discussed in Chapter 2 (section 2.2.2.2): stability, scope, tangibility, focus, and time frame. Together these describe the psychological contract as more transactional versus more relational in nature.

Subjects had to indicate the extent to which they agree with each of the 14 statements using a five-point Likert scale ranging from (1) = "not at all" to (5) = "to a very great extent". After reversed-scoring of some items, a higher score always indicated a more relational psychological contract.

Because psychological contract features are not the explicit focus of this thesis, we did not explicitly consider the five dimensions of contract features separately but instead we only used one composite scale. Reliability analyses on the 14 items at T1 suggested that the reliability of the scale significantly increased when five items were withdrawn (from .70 to .78). These items all referred to the dimensions focus and stability (e.g. "My work has a strong influence upon my life" and "My tasks and what is expected of me often change"). Therefore we decided to retain only nine items for further analyses. Alpha coefficients for the scales based upon these 9 items were .78 at T1, .81 at T2, .83 at T3, and .81 at T4. The retained items are listed in Table 6.16.

Table 6.16: Overview of Items used to Measure Relational Psychological Contract Features

| RELATIONAL PSYCHOLOGICAL CONTRACT FEATURES |
|---|
| My commitment to this organization only involves what is explicitly expected of me (*R*) |
| I consider working for this organization mainly as an exchange of labor for money (*R*) |
| I work here not only for the money but also to have social contacts and to further develop myself |
| I consider this employment relationship as something temporary (*R*) |
| My loyalty to this organization is restricted to what is specified within my employment contract (*R*) |
| My efforts for this organization involve much more than what is explicitly expected of me |
| I think I will stay with this organization for a longer time period |
| I do not identify with the goals of this organization (*R*) |
| I feel part of a team within this organization |

### 6.4.7. Information Seeking

Our measure of contract-related information seeking is based upon existing scales that have been developed within the socialization literature (Ashford, 1986; Morrison, 1993a; 1993b; Ostroff & Koslowski, 1992). We only focused on the inquiry measures used in these studies. We rephrased the subject of information seeking referred to within existing scales to the six types of employer inducements and the six types of employee contributions we had distinguished as relevant content dimensions of the psychological contract. Separately for each of these dimensions respondents were asked to indicate the frequency with which they have asked for information by consulting six information sources during the previous four-week period. All responses were on five-point scales (1 = *never*; 2 = *once or twice a month*; 3 = *once a week*; 4 = *a few times a week*; 5 = *daily*).

In accordance with Ashford (1986), the following information sources were selected: direct supervisor, senior management, more experienced colleagues, other new hires, coach or mentor, and HR-representatives. Based upon the inspection of descriptive statistics, we decided to exclude the information sources "senior management" and "HR-representatives" due to low frequencies and missing values. This was also done by Morrison (1993a) who also found low frequencies and variability for both sources.

Since we had to adjust our a priori specified factor structure of the psychological contract content dimensions (cf. 6.4.5.1), we excluded the scale measuring information seeking about employer inducements relating to "personal support". The scales measuring information seeking about employee contributions relating to "job performance" and "extra-role behavior" were aggregated into one scale measuring "in and extra role behavior". The reliabilities for the information seeking scales are represented in Table 6.17. Inspection of this table shows that the information seeking scales had sufficient reliabilities at each data collection wave.

Table 6.17: Reliability Coefficients for Information Seeking Scales

| | T1 | T2 | T3 | T4 |
|---|---|---|---|---|
| **EMPLOYER INDUCEMENTS** | | | | |
| Career Development | .73 | .76 | .75 | .74 |
| Job Content | .65 | .69 | .68 | .70 |
| Social Atmosphere | .65 | .70 | .71 | .76 |
| Financial Rewards | .71 | .74 | .72 | .77 |
| Work-Life Balance | .74 | .74 | .79 | .78 |
| **EMPLOYEE CONTRIBUTIONS** | | | | |
| In & Extra Role Behavior | .71 | .74 | .77 | .78 |
| Flexibility | .78 | .74 | .74 | .78 |
| Ethical Behavior | .80 | .83 | .83 | .82 |
| Loyalty | .82 | .83 | .83 | .80 |
| Employability | .79 | .71 | .71 | .77 |

### 6.4.8. Evaluation of the Employment Relationship

At T4, two more general employee attitudes were measured: satisfaction and met expectations. Since the relationship between the psychological contract and outcome variables has been extensively assessed within previous research (see Chapter 2) this was not a central objective within this thesis. These outcome variables are only addressed in relationship with contract-related information seeking. For this reason, and because we already used a lengthy questionnaire, we only used three items to measure satisfaction and two items to measure met expectations.

The items used to measure ***satisfaction*** are the following: "Overall, how satisfied are you with your job?", "Overall, how satisfied are you with your organization?", and "To which extent is this your dream job?". The five-point rating scale ranged from (1) = "Not at all" to (5) = "To a very great extent". The Alpha reliability coefficient for this scale was .78.

Our measure of ***met expectations***, consisted of two items and was based on Buckely *et al.* (1998). The items are: "To which extent does this job correspond with what you expected?" and "To which extent does working for this organization correspond with that you had expected?" The five-point rating scale ranged from (1) = "not at all" to (5) = "to a very great extent". The Alpha reliability coefficient for this scale was .80.

### 6.4.9. Socio-Demographic Control Variables

In part one of the first questionnaire (T0) we measured the following socio-demographic characteristics: age, gender, level of education, formal employment contract, prior professional experience (number of years of experience and number of prior employers). Since the questionnaires were pre-coded it was not necessary to ask for the organization to which a respondent belonged. As explained in section 6.3.3, participants were clearly informed about the use of this coding system.

## 6.5. Attrition Bias and Missing Data Analyses

In this section we successively describe the procedures we used to assess possible biasing effects of subject attrition (section 6.5.1) and of item non-response (section 6.5.2).

### 6.5.1. Attrition Bias

A common threat to the validity of longitudinal findings is sample selectivity, or nonrandom subject attrition (Little, Lindenberger & Maier, 2000). Attrition occurs when not all subjects who have been asked to participate in a longitudinal study partake in all assessments. Attrition can lead to bias or selectivity if the persons who continue to participate (i.e. continuers) differ from those who do not (i.e. dropouts) (Little *et al.*, 2000; Menard, 1991). If attrition leads to some degree of bias, the conclusions based on the selective sample are no longer an accurate reflection of the original sample.

We assessed the possible effects of attrition following the procedures proposed by Lance *et al.* (2000), Little *et al.* (2000) and Vandenberg & Self (1993). First we calculated a participation profile for all subjects, which is based on their participation (1) versus nonparticipation (0) at each of the five data collection waves. Each participation indicator was multiplied by 10 for each participation level higher than the first level. The participation profile is then defined as the sum of these five multiplied indicators. In this study, having five waves, this profile can range from '10000' (only participation at T0) to '11111' (participation at all waves). Since the number of "returners", i.e. people who drop out at a certain wave but return in a subsequent wave was small and dispersed over the waves, attrition analyses were only conducted for those dropouts who did not return afterwards. In total 133 subjects missed one or more waves but returned afterwards, and 27 subjects only

participated at T4. These subjects were treated as missing values in our attrition analyses. Based on these profiles, five groups were created. *Group 1* (profile 10000, n = 248) completed measures only at T0 but not at T1, T2, T3, or T4. *Group 2* (profile 11000, n = 140) completed measures at T0 and T1 but not at T2, T3, or T4. *Group 3* (profile 11100, n = 89) completed measures at T0, T1 and T2, but not at T3 or T4. *Group 4* (profile 11110, n = 111) completed measures at T0, T1, T2 and T3 but not at T4. *Group 5* (profile 11111, n = 359) completed measures at all five periods.

The analysis of attrition bias reported here involves univariate comparisons of descriptive statistics to assess differences between dropouts and continuers on demographics and on the study variables that were measured in common to the subgroups (Lance *et al.*, 2000; Vandenberg & Self, 1993).

We conducted four waves of analyses. The ***first wave*** included all five groups, and examined whether they differed demographically and whether there were any differences across the antecedent variables measured at T0. With respect to the demographic characteristics, no significant differences in age, gender, prior work experience and number of years of prior experience were found between the five groups. With respect to the antecedent variables measured at T0, a multivariate analysis of variance (MANOVA) was conducted to detect whether there was an overall response bias across the T0 variables as a function of group membership. The MANOVA was overall significant: $F(28) = 1.735$, $p < .05$. Tests for between-subjects effects indicate that there is only a significant between-groups effect for the variable *career strategy* ($F(4) = 3.285$, $p < .05$). Post-hoc comparisons show that those subjects who participated only at T0 (Group 1) score significantly lower (M = 3.34) on local orientation than those subjects who have participated at T0, T1 and T2 (Group 3) (M = 3.61). The other post-hoc comparisons are not significant. Thus there is no evidence for a systematic effect of local orientation on continuance of participation in the study.

The ***second wave*** was identical to the first except the analysis was limited to Groups 2, 3, 4 and 5 and included only the responses to the variables measured at T1. The overall MANOVA was not significant: $F(93) = 1.193$, $p > .01$. Between-subjects effects show two significant differences: There is an overall significant between-groups difference for perceived *employee promises relating to employability* ($F(3) = 3.254$, $p < .05$) and for the *importance of contributions relating to employability* ($F(3) = 2.735$, $p < .05$). Post-hoc comparisons indicate that both differences are due to a significant difference between Group 2 and Group 3. For promises about employability, Group 2 respondents score significantly lower than Group 3 respondents (M = 2.50 versus M = 2.93). For importance of employability, this difference is in the same direction (Group 2: M = 3.32 versus Group 3: M = 3.65). Again the differences between other groups are not significant, suggesting that there is no systematic effect on subject dropout.

In the ***third wave*** we included Groups 3, 4 and 5 and we examined possible differences in responses to the variables measured at T2. The overall MANOVA was not significant: $F(62) = 1.031$, $p > .05$. Tests for between-subjects effects for each of the variables measured at T2 show one significant difference: There is an overall significant between-groups difference for *perceived fulfillment of employee promises relating to ethical behavior* ($F(2) = 5.56$, $p < .01$). Post-hoc comparisons show Group 3 subjects score significantly lower on ethical behavior (M = 3.74) than the subjects belonging to Group 4 (M = 3.90) and Group 5 (M = 3.87). No other significant between-groups effects were found so there is no systematic indication of bias in the T2 measures due to subject dropout.

In the ***fourth wave*** Groups 4 and 5 were included and we compared differences in responses to the variables measured at T3. Again, the overall MANOVA was not significant: $F(51) = 1.214$, $p > .05$. Between-subjects tests for each of the variables measured at T3 indicate that these tests are significant for three scales measuring perceived promises about employer inducements: *job content* ($F(1) = 6.283$, $p < .05$), *social atmosphere* ($F(1) = 4.210$, $p < .05$) and *work-life balance* ($F(1) = 4.314$, $p < .05$). These differences do not consistently go into the same direction. Subjects having participated in the full study (Group 5) score significantly lower than those who

dropped out after T3 (Group 4) on perceived promises relating to job content (M = 3.56 versus 3.75) and promises relating to social atmosphere (M = 3.50 versus 3.52). On the other hand, Group 5 subjects scored significantly higher than Group 4 subjects on perceived promises relating work-life balance (M = 3.32 versus M = 3.21). These differences only hold for the perception of employer promises, not for the importance or evaluation of these inducements.

Together our analyses of differences in descriptive results due to subject dropout suggest that there is little systematic effect of subject attrition for the first three waves. The overall proportion of significant differences between profile groups is small compared to the total number of pairwise comparisons that are possible (the overall percentage of significant differences is about one percent). Moreover, the mean scores for which significant differences were found do not suggest the existence of systematic biases because they always refer to different variables and they are not related to a specific profile group. The significant differences between Group 4 and Group 5 for T3 perceived employer promises relating to job content, social atmosphere and work-life balance could suggest that subjects who did not continue their participation at T4, had higher expectations about their job content and the social atmosphere and that this has caused them to withdraw from the study. However, in that case it would have been plausible if we had also found a significant difference for the evaluation of promises or the perception of inducements received. Since the direction of the differences between Group 4 and Group 5 subjects on these variables is not consistent it is difficult to interpret them as evidence of attrition bias without further information.

Based upon this information we felt comfortable conducting our longitudinal analyses with the sample having participated at T0 and T1 (n = 781) for answering our research question on individual antecedents and with the full study sample (n = 359) for answering our research question on psychological contract development.

As suggested by Little *et al.* (2000) it is not only important to asses differences mean-level differences in the study variables as a function of subject attrition. They also suggest assessing the effects of attrition upon structural relationships between study variables when this is possible. Therefore in Chapter 7 we will analyze whether the structural relationships found between individual characteristics and initial promissory beliefs are affected by attrition bias by comparing our results with the results that are obtained when only those newcomers who participated in the full study are included in the analyses.

### 6.5.2. Missing Data

Besides missing data due to attrition of participants from the study, it is also important to examine the occurrence and the pattern of missing values within the sample at each data collection wave. In section 6.2.1 we already indicated that respondents having more than 10% of missing values were excluded from the analyses for that wave. This procedure was followed at each of the five data collection waves. Respondents having more than 10% of missing values at more than two waves were excluded from the whole study.

#### *6.5.2.1. Missing Data Checks*

Here we discuss the issue of missing values at the item level. When there are missing values for certain items, there are two questions the researcher must address (Kline, 1998). First, ***how many*** data are missing. According to Cohen & Cohen (1983), more than 10% of missing data on a particular variable is problematic. For all five data collection waves, the relative frequency of missing values for each item separately ranged between 0 and 2%. Exceptions were those items measuring information seeking (T1, T2, T3, T4) that referred to the frequency of consultation of the newcomer's mentor or coach. These were all respondents who indicated that they had no mentor, a "user-defined" missing value. The same held for the evaluation of psychological contract fulfillment at T2, T3 and T4 where respondents could indicate that a certain promise was never made or that it was too soon to evaluate the fulfillment of a promise. These answers were also treated as missing values.

Second, the ***pattern*** of missing data must be examined to find out if values are missing at random or in a systematic way (Kline, 1998). If data are missing at random (MAR), this means that the probability of the presence versus absence of scores on some variable is unrelated to subjects' true status on that variable and that subjects with missing values differ only by chance from those with non-missing observations (Kline, 1998). In case of data that are MAR, results based on data from subjects with non-missing observations should generalize to those with missing data. T-tests comparing subjects with missing and non-missing items suggested that, with a few exceptions, the missing data in our study could be considered MAR at each data collection wave. Significant differences between both groups of subjects were only found at T0 for equity sensitivity (subjects with missing data scoring higher on equity sensitivity), at T1 for importance attached to social atmosphere (subjects with missing data attaching more importance to social atomosphere) and at T3 for employer inducements received relating to financial rewards (subjects with missing data receiving fewer financial rewards) and for employee promises relating to employability (subjects with missing date believing to have made more promises). Comparisons at the item level also suggest that the assumption of MAR data was feasible with only a few exceptions.

#### *6.5.2.2. Procedure to Handle Missing Data*

For analyses in SPSS, the standard method of *pairwise deletion of missing values* was used. This means that subjects were excluded from analyses only if they had missing data on the variables involved in a particular computation (Kline, 1998). This method was preferred over imputation of missing observations with estimated scores since this allowed us to use the same database with non-replaced missing values for structural equation analyses, in which the *full information maximum likelihood method* (FIML) was used. FIML is a modification of standard maximum likelihood estimation in structural equation modeling that handles incomplete data. FIML requires the analysis of the raw data file and the presence of a mean structure that includes the observed variables. With FIML, missing data are estimated using all the information of the observed data, including information about the mean and variance of missing portions of a variable, given the observed portion(s) of other variables (Arbuckle, 1996; Wothke, 2000). FIML is the preferred method for dealing with missing data in structural equation analyses since it is more efficient and less biased than listwise deletion, pairwise deletion and mean imputation methods when data are MAR (Arbuckle, 1996; Enders, 2001; Enders & Bandalos, 2001; Wothke, 2000).

## 6.6. ANALYTICAL CHOICES

*"Any model is an approximation to reality. A theory is an abstract set of ideas that links together concepts. A model is a formal representation of a theory. The theory at best approximates reality – and the model derived from it can do no better"* (Bollen, 1989: 71). In this section we discuss the general decisions we have made with respect to the methods used for analyzing our data. This is done separately for each of the two major research questions in this thesis. Although both research questions are answered based on the longitudinal study, we needed to use different methods for analyzing them since both address different issues. While the first question focuses on *causal relationships* (individual antecedents of newcomers' initial promissory beliefs), the second question addresses the *changes* in newcomers' psychological contracts during the first year of employment.

For both groups of analyses the psychological contract is our central research variable. In section 6.4.5 we have already described in detail the development and assessment of the measurement models we developed for assessing the psychological contract. For all variables included in our structural (causal or change) analyses we used scale scores rather than individual items as manifest indicators. The reason for this decision is that using scale scores provides a higher subject-to-parameter ratio than when using a hybrid model (including both the measurement and structural component). The latter would thus reduce the power of our analyses (Kline, 1998).

Using scale scores also allows comparability between results obtained from regression analyses and results obtained from structural equation analyses.

In Table 6.18 we provide an overview of the analytical techniques used for analyzing our research questions. All analyses started with screening our data for the existence of outliers and univariate and multivariate normality. For variables measured repeatedly, longitudinal measurement tests have been conducted before proceeding with the longitudinal analyses.

Table 6.18: Overview of Analytical Techniques used to Answer our Research Questions

| RESEARCH QUESTION | ANALYTICAL TECHNIQUE |
|---|---|
| *RQ1: What is the relationship between newcomers' individual characteristics and the content and features of their psychological contracts?* | Hierarchical regression analyses |
| *RQ2: How does the psychological contract develop during organizational socialization?* | Longitudinal measurement invariance tests (SEM) |
| RQ2A: What are the changes in newcomers' psychological contracts occurring over time during organizational socialization? | Univariate latent growth modeling (SEM) |
| RQ2B: What is the relationship between newcomers' psychological contract evaluations and subsequent promissory beliefs over time? | Conditional change analyses |
| RQ2C: What is the relationship between newcomer information seeking about the psychological contract and psychological contract perceptions and evaluations? | conditional and multivariate latent growth modeling (SEM) |

In the following sections we successively discuss our analytical choices for assessing the individual antecedents of newcomers' psychological contracts (section 6.6.1), and for investigating changes in newcomers' psychological contracts (section 6.6.2). We will further elaborate on these analytical choices when we present our empirical results in Chapter 7 and Chapter 8.

### 6.6.1. Individual Antecedents of Newcomers' Psychological Contracts

We used hierarchical regression analyses to examine the relative influence of each of the individual antecedents included in our research model on newcomers' promissory beliefs about each of the content dimensions of employer inducements and employee contributions and on their psychological contract features, controlling for socio-demographic variables.

There were several reasons why we decided to analyze our hypotheses relating to Research Question 1 using the more traditional method of regression analysis. First, the multidimensional nature of our central dependent variable made it more feasible to use regression analyses. Our aim is to analyze the impact of multiple individual antecedents on newcomers' promissory beliefs about five dimensions of employer inducements and five dimensions of employee contributions and on their psychological contract features. We are interested in how newcomers' promissory beliefs about each of these dimensions are affected by their individual characteristics (work values, career strategy, locus of control and exchange orientation). Or, differently stated, how these individual characteristics can explain differences in newcomers' initial promissory beliefs. Second, because this is one of the first empirical studies to address the influence of individual antecedents on the psychological contract, for most antecedents – with the exception of work values – we had no a priori hypotheses about their relationship with specific content dimensions of the psychological contract. Therefore a more confirmatory analysis technique like structural equation modeling is less feasible since this requires the a priori specification of a structural model. Third, using hierarchical regression analyses also allows us to explore the relationship of each antecedent with each dependent variable, while controlling for the effects of the other antecedents and of socio-demographic characteristics. This is done by entering all antecedent variables as one block in the

regression equations. In this way, we control for the intercorrelations that probably exist among the antecedent variables. In Chapter 7 we will further discuss the analytical procedure we have followed to test our hypotheses.

### 6.6.2. Development of Newcomers' Psychological Contracts

The measurement of longitudinal change has been a long-standing and controversial topic (Burr & Nesselroade, 1990; Cronbach & Furby, 1970; Curran & Muthén, 1999; Taris, 2000; Williams & Podsakoff, 1989). Even today, there is little consensus, either in theory or in practice, on the best methods for the analysis of longitudinal change (Chan, 1998). In our analyses we will use a mixture of more traditional analytical techniques (conditional change analysis) and a more recent technique, namely latent growth modeling. Before starting the longitudinal analyses, a necessary first step is to assess the longitudinal measurement invariance of variables measured repeatedly. We will first discuss the procedure followed to examine longitudinal measurement invariance (section 6.6.2.1), followed by a description of latent growth modeling (section 6.6.2.2) and of conditional change analyses (section 6.6.2.3).

#### *6.6.2.1. Examination of Longitudinal Measurement Invariance*

This is often the most basic question about development and changes: "*have we measured the same construct at each time point*?" The use of multiple-indicator measures by itself does not ensure that the factor structure and loadings are identical at each measurement occasion (Chan, 1998; McArdle & Aber, 1990). Establishing measurement invariance over time should therefore precede longitudinal analyses with repeated measures data because measurement invariance constitutes evidence that the same construct is being measured and measured with the same precision, which in turn allows meaningful direct interpretations of changes over time (Chan, 1998; Vandenberg & Lance, 2000).

We used structural equation modeling (SEM) to test measurement invariance, following the procedure proposed by Chan (1998), Chan & Schmitt (2000), Lance *et al.*, (2000), and Vandenberg & Lance (2000). This procedure is the same as for assessing measurement invariance in multiple-group analyses. It implies that for each dimension of employer inducements and employee contributions and for the measures of information seeking, nested model comparisons are conducted, using the $\chi^2_{difference}$ test. For each of these variables, a confirmatory factor analysis model is developed in which the factors corresponded with measurement occasions. Two models are successively tested[7]. The first model is a test of configural invariance, the second model tests for factorial invariance[8]. The first model assesses ***configural invariance*** by testing if the unidimensional structure of a

[7] Within the methodological literature several more stringent models for assessing measurement invariance are proposed, in addition to the two models evaluated here. These tests are conducted with the factorial invariance model as the reference model. They test for scalar invariance by assessing changes in model fit with the constraint of invariant intercepts across measurement occasions for like items and for equal unique error variances across occasions. (Chan, 1998; McArdle & Aber, 1990; Vandenberg & Lance, 2000). According to Chan (1998), these models are extremely demanding, and most researchers recognize that it is unrealistic to expect such extreme invariance to hold in actual data except in highly convenient situations. Therefore, Chan (1998) as well as other researchers (e.g. Byrne, 2001; Chan & Schmitt, 2000; Cunningham, 1991; McArdle & Aber, 1990) state that the use of equality of factor loadings (Model 2) is the standard for measurement invariance. In our study we have assessed these additional models based on our data, and in general these models showed a significant decrease in model fit compared to the model of factorial invariance. Therefore in Chapter 8 we will only discuss our results with respect to the two models described here.

[8] Some authors recommend as a first step an omnibus test for the equality of covariance structures across data collection waves (cf. Vandenberg & Lance, 2000). If the hypothesis of equal covariance structures cannot be rejected, measures are considered to be equivalent and thus further tests for invariance not necessary. However, this test often leads to contradictory findings since sometimes the use of further tests indicates that there is measurement variance on some parameter while the hypotheses of equal covariance structures was confirmed (Byrne, 2001). Such inconsistencies are due to the absence of a baseline model for the test of invariant variance-covariance matrices. Therefore Byrne (2001) contends that this omnibus test should not be regarded as a necessary prerequisite to the testing of more specific hypotheses related to measurement invariance.

measure generalizes over time. In this model the items are constrained to load only on the respective measurement occasion factor. The second model tests for metric or ***factorial invariance*** by constraining like item's factor loadings as invariant across measurement occasions. A non-significant reduction in fit from the first to the second model is taken as evidence of equality of factor loadings, that is, evidence of measurement invariance (Chan, 1998). This means that we can state that we have measured the same construct in the same way at each occasion (McArdle & Aber, 1990). Tisak & Meredith (1990) call this a "stationary invariant longitudinal factor analytic model".

In case the $\chi^2_{difference}$ test indicates a significant decrease in model fit for the second model compared to the first model there is evidence of non-invariance. When this occurs, it is desirable to test for ***partial invariance*** of factor loadings by examining the invariance of individual loadings to find out which ones are invariant and which ones are not (Bagozzi & Edwards, 1998; Byrne, Shavelson & Muthén, 1989). At least one factor loading per factor, preferably more, should be invariant to conclude that a reasonable degree of equivalence or correspondence between factors and measures is achieved across groups. This is necessary to rule out alternative hypotheses as accounting for any differences found in the analyses of changes over time. It is assumed that if the non-invariant items constitute only a small portion of the model, then they will not affect cross-group comparisons to any significant extent (Byrne *et al.*, 1989; Cheung & Rensvold, 1999). Following the procedure proposed by Byrne (2001; Byrne *et al.*, 1989) and Cheung & Rensvold (1999), we assessed partial invariance following a logic procedure in which first invariance is assessed for each pair of data collection waves. In a second step loadings are tested for equivalence one at a time and invariant loadings are constrained as invariant in each subsequent test for other loadings.
Further technical details as well as the results of these measurement invariance tests are discussed in Chapter 8.

#### *6.6.2.2. Latent Growth Modeling*

Latent growth modeling (LGM) has gained widespread acceptance as a potentially powerful approach to the description, measurement, and analysis of longitudinal data (e.g. Curran & Bollen, 2001; McArdle, 1998; McArdle & Aber, 1990; McArdle & Anderson, 1998; Raykov, 1997; Willett & Sayer, 1994). Recently, LGM is also used in the area of industrial and organizational psychology (Chan, 1998; Chan & Schmitt, 2000; Ployhart & Hakel, 1998; Lance et al., 2000)[9]. We used LGM to analyze Research Question 1A and 1C.

The task in latent growth analysis involves identifying an appropriate growth curve form that accurately and parsimoniously describes intraindividual change over time (at the aggregate level of analysis) and allows the examination of interindividual differences in the parameters (intercept and shape) that control the pattern of intraindividual change over time (at the individual level of analysis) (Chan & Schmitt, 2000). So in LGM we are interested in *unobserved* latent factors that represent growth trajectories thought to have given rise to the repeated measures over time (Curran & Husson, 2002).

Repeated measures polynomial analysis of variance (ANOVA) models are actually special cases of LGM, in which only the factor means are of interest (Meredith & Tisak, 1990). In LGM, rather than examining relations among observed variables between T1 and T2 and then between T2 and T3 and so on, the objective is to smooth over the observed measures to estimate the continuous trajectory that gave rise to these time-specific observed measures (Curran & Husson, 2002). This is done through estimation of latent growth factors that generated the observed repeated measures. Once estimated, the key focus of the analyses is then on these unobserved components of growth. The observed repeated measures are thus used to define one or more underlying latent

[9]According to Muthén & Curran (1997), latent curve analysis (LCA) is a better term than the common term latent growth modeling (LGM) in that it represents modeling of individual curves that correspond not only to monotonic growth but also to stability, decline, and combinations of these. However in this thesis we will always use the term latent growth modeling since this is also the term that is being used by researchers having used LGM within the industrial and organizational psychology literature.

growth factors using the SEM framework. In this sense LGM is a highly structured type of structural equation modeling. Whereas SEM typically incorporates only information about the covariance structure of the observed measures, LGM uses information about both the covariance structure and the mean structure of the observed variables. The latent variables are not introduced to represent latent variable constructs in the traditional psychometric sense of being measured by multiple indicators at a single time-point. Instead, observations at multiple time-points of the same outcome variable are used to determine latent variables that represent the *shapes* of the individual curves. Formally, the corresponding latent variable model is a CFA model with unusually restrictive factor loading constraints (Muthén & Curran, 1997: 372).

The two important attributes of an individual's change trajectory or growth curve are the ***intercept factor*** and the ***shape factor***[10]. The growth parameters that are estimated are the mean and variance of the intercept factor, the mean and variance of the shape factor and the covariance between the intercept and shape factor (Chan, 1998). The *intercept factor mean* corresponds to the initial status of the variable, that is, the value of the variable at the point when it was measured a first time. It estimates the outcome variable when the change trend is equal to zero. The *variance* of the intercept factor represents interindividual differences in initial status. The *shape factor* corresponds to the rate of change in the focal variable, that is the rate of increase or decrease over time. The *mean* of the shape factor represents the mean rate of change in the focal variable while the *variance* of the shape factor represents interindividual differences in this rate of change.
The means of the initial status and growth rate factors represent the group parameter values of the intercept and shape of the change trajectory, i.e. the *fixed effects of growth*. The variances of the initial status and growth rate factors represent the individual variability of each subject around the group parameters, i.e. *random effects of growth* (Curran & Muthén, 1999). Larger factor variances reflect greater interindividual differences in growth over time whereas smaller factor variances reflect more similar patterns of growth over time.

The fit of a latent growth model is assessed using the various model fit indices in SEM (Chan, 1998). If the model fits well, the size of the factor loadings reflects the size of the means of the observed variables. The fit of an LGM is assessed using the various model fit indices in SEM (Chan, 1998).

When growth models are fitted without the inclusion of predictor or outcome variables or without considering correlates of change, these are called univariate and unconditional growth models (Chan, 1998). A next step in LGM is then to model antecedents and outcomes of fitted growth models. These models are called *conditional growth models* (Chan, 1998; Duncan *et al.*, 1999). Including time-invariant *predictors* is done by respecifying the fitted univariate change model of a variable and to estimate the effects of individual predictors on the intercept factor, shape factor, or both. The respecified model allows tests of hypotheses about associations between individual predictors and individual differences in initial status (intercept) and rate of change (shape). In the same way, a fitted univariate change model can be respecified to estimate effects of the intercept and shape factors on time-invariant *outcomes* (Willett & Sayer, 1994).
The fitted univariate models of two or more time-variant variables can also be combined to estimate the covariances between intercept and shape factors from different change trajectories. Hence, *cross-domain relationships* between attributes of change trajectories can be tested (Chan, 1998; Chan & Schmitt, 2000). These models are called *multivariate growth models*.

We used univariate LGM to assess univariate changes in newcomers' psychological contracts over time (Research Question 2A). Conditional LGM and multivariate LGM were used to relate the fitted growth curves for contract-related information seeking to outcome variables and to changes in psychological contract perceptions (Research Question 2C). In assessing model fit we will use the overall model fit indices we have

[10] Some authors use the term 'slope' instead of 'shape', even in case of non-linear changes. Since changes in psychological contract variables can be linear or non-linear in form, we will always use the term shape instead of slope since this also includes other than linear functional forms of change trajectories.

described in section 6.4.2.2. Further technical details about LGM are described when we present our results in Chapter 8.

#### *6.6.2.3. Conditional Change Analyses*

To analyze the influence of newcomers' psychological contract evaluations and their actual experiences on changes in their promissory beliefs over time (Research Question 2B), we used regression analyses. More specifically we analyzed residual or conditional change models (Curran, 2000; Curran & Bollen, 2001; Finkel, 1995). This type of model first estimates the stability of a construct over time by regressing later measures of a construct onto earlier measures of the same construct. These across-time / within-construct predictions are often referred to as stability coefficients (Curran, 2000; Curran & Bollen, 2001). Once these stabilities are estimated, then in a second step earlier measures of predictor variables are included in the equation to predict later measures of the focal construct (across-time / across constructs parameters). In this way it is possible to examine whether a predictor affects an outcome variable above and beyond the effects of earlier measures of the outcome variable (Cohen & Cohen, 1983; Curran, 2000; Curran & Bollen, 2001; Finkel, 1995). A significant increase in explained variance due to the inclusion of one or more predictor variables indicates that these predictors are related to changes in the outcome variable. An advantage of using this conditional change model compared to an unconditional model is that regression to the mean is statistically controlled for (Finkel, 1995).
Residual change models can be estimated using a series of multiple regression analyses or by using a SEM framework. We used multiple regression analyses and we will follow the procedure prescribed by Cohen & Cohen (1983).

We assessed the impact of intermediate evaluations of the psychological contract (actual experiences and evaluation of promise fulfillment) on changes in newcomers' promissory beliefs. This was done for each dimension of employer inducements and employee inducements separately. In Chapter 8 we will provide further arguments to motivate our choice for using this analysis technique.

## 6.7. SUMMARY AND CONCLUSIONS

In this chapter we have discussed our research methodology and the measurements used in our study. First, we have motivated our choice for a longitudinal research design, more specifically a *five-wave longitudinal panel survey*. Second, we have discussed our research population, which consists of *organizational newcomers*. We have provided an overview of the eight organizations involved in the research and the sample of newcomers within each of these organizations. Data have been collected within the first year after organizational entry and the selection of causal lags was based upon information available within the socialization literature. Eighty percent of the initially contacted newcomers has participated at the first data collection wave, while forty-one percent of the initial respondents has participated in the full study. Both the initial response rate and attrition rate are comparable with what has been obtained in other longitudinal research.

In the next part of this chapter we have given a description of our *procedures to collect our data and to follow up responses over the different data collections*. This was followed by a detailed overview of the *measures* used within this study. In this overview we have described the procedures for the selection and development of measurement scales. For the newly developed psychological contract scales – aimed at measuring perceptions and evaluations of employer inducements and employee contributions – we have elaborated in detail on the construction and characteristics of these scales. Based on our review of existing measurements we have selected items that were proposed to load on different content dimensions of the psychological contract. Based on careful statistical and empirical assessments we finally retained five dimensions of employer inducements (career development, job content, social atmosphere, financial rewards and work-life balance) and five dimensions of employee contributions (in & extra role behavior, flexibility, loyalty, ethical behavior and employability). Information obtained from confirmatory factor analyses, reliability and validity analyses suggest that we can be

confident proceeding our analyses using these scales. Moreover, they provide evidence for the multidimensional nature of the content of the psychological contract.

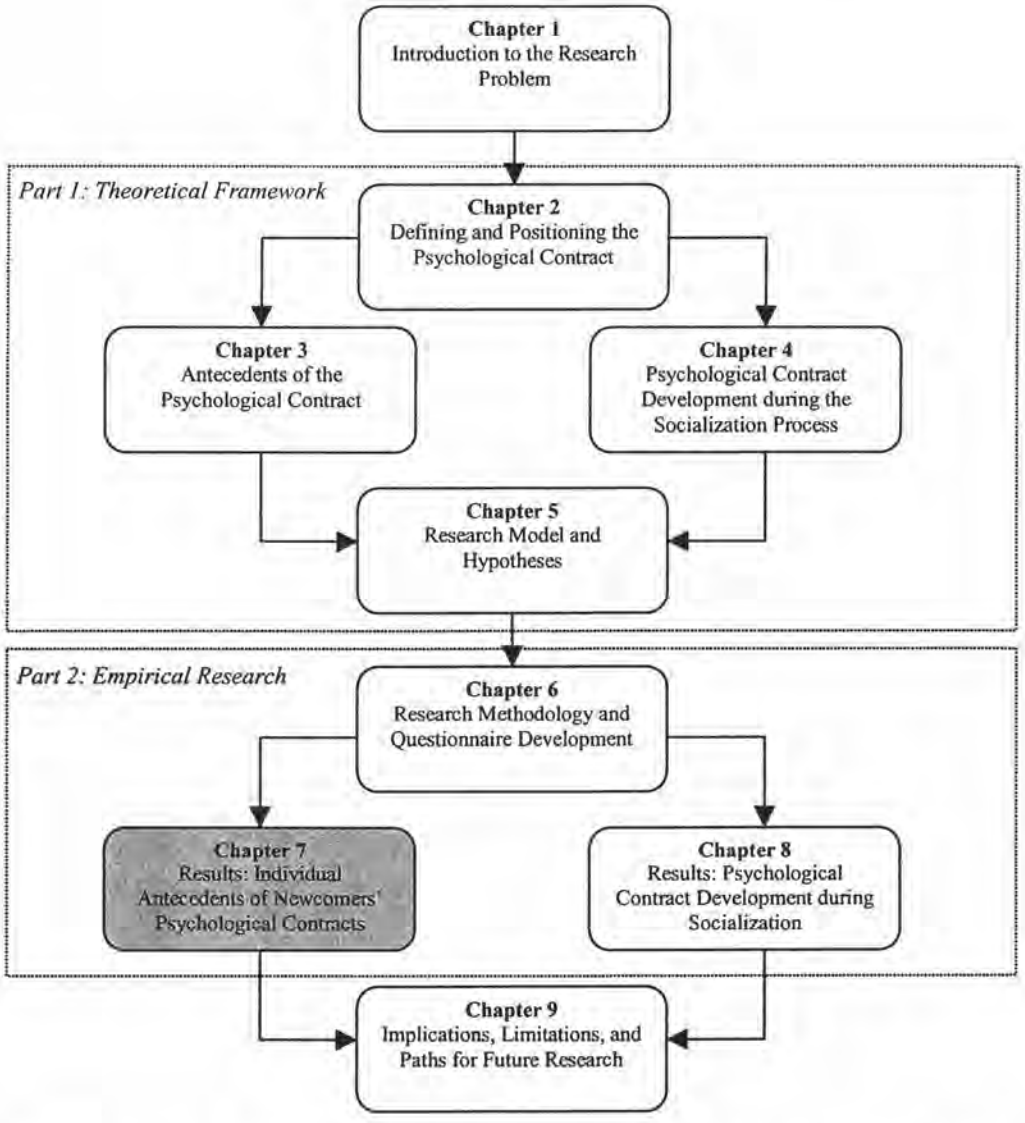
In the subsequent section of this chapter we have described our *analyses of attrition bias and of missing data.* These analyses suggest that there is no general response bias due to subject attrition and that missing data are missing at random. Finally, we have discussed the *analytical choices* we have made in order to answer our research questions. These involve both regression analyses and latent growth modeling.

In developing our methodology for this study, we have taken into account two shortages characterizing the literature on psychological contracts. First, the use of a longitudinal design allows us to *explicitly address the dynamic nature of the psychological contract* by studying changes in psychological contract perceptions and evaluations over time. As to date, most studies on psychological contracts are cross-sectional or they only focus on two measurement occasions, making it difficult to model change processes. As we have discussed in Chapter 4, in obtaining a better insight in newcomer psychological contract development there is much that can be learned from the literature on newcomer socialization. This not only holds for the knowledge that has been developed within this research tradition, but also for the research designs used. We have built on these research designs when making our choices regarding the design of our empirical study (time span and selection of data collection waves).
Second, the scales we have developed for measuring the psychological contract contribute to the debate on the *operationalization of the construct.* In our measures we consider the three facets of the construct (content, features, and evaluation) and we explicitly take into account both parties' contributions (employer and employee). As we have discussed in Chapter 2, the existing research is characterized by an over-emphasis on the employer side. In selecting our items for representing employee contributions and employer inducements we have considered multiple dimensions. Moreover we have used commensurate measures to assess the content and evaluation of the psychological contract, making it possible to directly compare newcomers' perceptions with their evaluations of different psychological contract dimensions. Since we have also used the same dimensions to measure contract-related information seeking, it is possible to directly assess the role of information seeking in psychological contract development, taking into account these content dimensions.

The methodological choices we have discussed in this chapter are an important step for the subsequent analyses of structural relationships that will be presented in the following chapters. In Chapter 7 we will present the results with respect to our first research question, while the results for the second research question will be presented in Chapter 8.

## CHAPTER STRUCTURE

# Chapter 7
# Results: Individual Antecedents of Newcomers' Psychological Contracts




*In this chapter we present the results of the first part of our empirical study, which addresses the relationship between individual antecedents and newcomers' psychological contracts at organizational entry*[1]*. First, we briefly recapitulate the methodology followed to answer our research questions (section 7.1). Subsequently, we present the descriptive and explorative results (section 7.2), followed by the results of the regression analyses we conducted in order to test our hypotheses (section 7.3). We end this chapter with a discussion of our findings in view of the proposed hypotheses (section 7.4).*

[1] Papers on the individual antecedents of newcomers' psychological contracts (based on intermediate results) have been presented at the Global HRM Conference in Barcelona, July 2001 and at the Academy of Management Conference in Washington, August 2001. They are published in the following working paper: De Vos, A., Buyens, D., & Schalk, R. (2001). Antecedents of the psychological contract: The impact of work values and exchange orientation on organizational newcomers' psychological contracts. *Working paper No. 01/120, Ghent University, Faculty of Economics and Business Administration.*

## 7.1. METHODOLOGY AND ANALYTICAL CHOICES

In our analyses we address the relationship between individual antecedents and newcomers' initial promissory beliefs[2]. We conduct our analyses using data collected at the *first two data collection waves* of our longitudinal study: at entry (T0) and four weeks after entry (T1). They are based on a total number of ***781 respondents***, i.e. those newcomers who participated both at T0 and at T1, and they represent fifty-seven percent of the initially contacted sample. Respondents' mean age is 26.94 years (S.D. = 5.68), with an average of 3.89 years of prior work experience (S.D. = 5.73). Sixty-eight percent of the respondents are male.

At ***T0*** the ***antecedent variables*** have been measured, i.e. *work values, career strategy, locus of control, and exchange orientation*. At ***T1*** the ***dependent variables*** have been measured, i.e. newcomers' *promissory beliefs about employer inducements and employee contributions* and the *features of their psychological contracts*. The measurement of these variables has been described in Chapter 6. In our analyses we focus on the composite scales for perceived organizational and employee promises (second order factor models) as well as on the different content dimensions (first order factor models). In our analyses we controlled for the demographic characteristics gender, age and prior work experience, which have been measured at T0.

We conducted a series of hierarchical regression analyses to examine the relative influence of each of the individual antecedents included in our research model, on each of the content dimensions of promissory beliefs and on the features of newcomers' psychological contracts, controlling for demographic variables. For each of these analyses the control variables were entered in Step 1. A dummy variable was created for gender (feminine = 0; masculine = 1). Given the very high correlation between the demographic variables age and years of experience (r = .92), we decided only to use age as a control variable in the regression analyses. In this way we resolve the problem of multicollinearity between both variables and the fact that their correlation partials out possible effects of both variables on our outcome variables. In Step 2 all the antecedent variables were entered into the regression equation. They were entered together in order to assess the relative influence of each antecedent, controlling for the influence of the other antecedents.

## 7.2. DESCRIPTIVE AND EXPLORATIVE STATISTICS

Descriptive statistics, reliabilities, and zero-order correlations are displayed in Table 7.1 on the following page. Due to the large sample size on which our analyses are based (N = 781), even very small correlations are significant at the 5% level. For this reason, in order to impose a more stringent criterion, only correlations exceeding .12 will be discussed, i.e. those correlations that are significant at the $p < .001$ level.

Demographic Variables

*Age* and *years of experience* are very highly correlated ($r = .92$). Both are negatively related to promissory beliefs about employer inducements and employee contributions but they are positively associated with a relational psychological contract ($r = .14$). Age is also negatively related to the importance of social values ($r = -.12$) and positively related to equity sensitivity ($r = .24$). The latter also holds for the years of experience ($r = .24$). In general, gender is not strongly associated with any of our research variables. The strongest correlation exists between gender and the importance of social values ($r = -.13$), indicating that women attach more importance to social values than men do.

[2] Although not reported here, we have also investigated the relationship between individual antecedents and newcomers' initial *information-seeking behaviors*. The results of these analyses have been presented at the EAWOP Conference in Prague, May 2001 and at the SIOP conference in Toronto, April 2002. The latter paper is currently under review for publication in *International Journal of Selection and Assessment* (De Vos, A., Buyens, D., & Schalk, R. (2002). Making Sense of a New Employment Relationship: Psychological Contract-Related Information Seeking and the Role of Individual Dispositions).

Table 7.1: Means, Standard Deviations, Alpha Reliabilities and Bivariate Correlations of Variables included in the Analyses

| | Mean | S.D. | α | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Age | 26.94 | 5.68 | - | | | | | | | | | | | | | | | | | | | | | | | |
| 2. Gender (F=0; M=1) | 0.67 | 0.47 | - | .04 | | | | | | | | | | | | | | | | | | | | | | |
| 3. Years of experience | 3.89 | 5.73 | - | .92 | .01 | | | | | | | | | | | | | | | | | | | | | |
| 4. Value Advancement | 3.83 | 0.40 | .82 | -.01 | .03 | -.03 | | | | | | | | | | | | | | | | | | | | |
| 5. Value Autonomy | 3.75 | 0.56 | .70 | .08 | -.02 | .09 | .44 | | | | | | | | | | | | | | | | | | | |
| 6. Value Economic rewards | 3.84 | 0.61 | .79 | -.05 | -.05 | .03 | .30 | .24 | | | | | | | | | | | | | | | | | | |
| 7. Value Group orientedness | 3.63 | 0.57 | .76 | -.12 | -.13 | -.09 | .37 | .17 | .29 | | | | | | | | | | | | | | | | | |
| 8. Locus of control | 3.46 | 0.41 | 78 | -.07 | .02 | -.08 | .01 | -.12 | -.13 | -.01 | | | | | | | | | | | | | | | | |
| 9. Local career orientation | 3.47 | 0.66 | .67 | .09 | .01 | .11 | -.06 | -.18 | .18 | .07 | .07 | | | | | | | | | | | | | | | |
| 10. Exchange ideology | 3.13 | 0.70 | .72 | -.06 | .06 | -.09 | .06 | .10 | .06 | -.01 | -.15 | -.11 | | | | | | | | | | | | | | |
| 11. Equity sensitivity | 3.37 | 0.78 | .75 | .24 | .05 | .24 | -.05 | -.15 | -.01 | .00 | .00 | .29 | -.17 | | | | | | | | | | | | | |
| 12. OP Career development | 3.87 | 0.87 | .82 | -.17 | .11 | -.19 | .17 | .01 | -.03 | .08 | .12 | .01 | .02 | -.10 | | | | | | | | | | | | |
| 13. OP Job content | 3.65 | 0.72 | .75 | .09 | .06 | .09 | .25 | .14 | .02 | .15 | .13 | .04 | .03 | .04 | .40 | | | | | | | | | | | |
| 14. OP Social atmosphere | 3.45 | 0.88 | .87 | -.14 | -.03 | -.09 | .14 | -.05 | .14 | .32 | .09 | .11 | .02 | .03 | .15 | .33 | | | | | | | | | | |
| 15. OP Financial rewards | 3.23 | 0.80 | .63 | -.10 | .08 | -.10 | .15 | .06 | .08 | .12 | .08 | .02 | .03 | -.08 | .37 | .32 | .24 | | | | | | | | | |
| 16. OP Work-life balance | 3.23 | 0.82 | .66 | -.05 | .02 | -.03 | .06 | .11 | .09 | .21 | -.01 | .08 | .01 | .09 | .06 | .17 | .33 | .27 | | | | | | | | |
| 17. OP Total | 3.46 | 0.52 | .83 | -.11 | .07 | -.10 | .23 | .08 | .10 | .28 | .13 | .08 | .03 | .00 | .57 | .67 | .68 | .69 | .59 | | | | | | | |
| 18. EP Flexibility | 2.63 | 0.80 | .63 | -.07 | .04 | -.08 | .20 | -.04 | .06 | .15 | .08 | .13 | -.11 | .05 | .19 | .22 | .23 | .24 | .10 | .30 | | | | | | |
| 19. EP Loyalty | 2.13 | 1.04 | .76 | -.06 | -.03 | -.06 | .15 | -.02 | .14 | .20 | .02 | .25 | -.05 | .05 | .05 | .09 | .31 | .17 | .18 | .27 | .43 | | | | | |
| 20. EP Ethical behavior | 3.87 | 0.87 | .77 | -.13 | -.03 | -.09 | .11 | -.05 | .12 | .17 | .17 | .13 | -.09 | .03 | .16 | .19 | .36 | .20 | .21 | .36 | .34 | .33 | | | | |
| 21. EP Employability | 2.69 | 1.18 | .78 | -.07 | .00 | -.07 | .15 | -.03 | .04 | .15 | .03 | .11 | -.08 | .06 | .07 | .07 | .19 | .06 | .16 | .18 | .47 | .46 | .36 | | | |
| 22. EP In & extra role behavior | 3.70 | 0.77 | .84 | -.10 | -.08 | -.07 | .19 | .00 | .17 | .31 | .08 | .14 | -.03 | .06 | .15 | .29 | .53 | .22 | .19 | .44 | .45 | .39 | .56 | .38 | | |
| 23. EP Total | 3.15 | 0.66 | .88 | -.12 | -.04 | -.10 | .22 | -.03 | .15 | .28 | .12 | .20 | -.09 | .06 | .18 | .26 | .47 | .26 | .24 | .45 | .72 | .69 | .73 | .67 | .82 | |
| 24. Relational PC | 2.89 | 0.51 | .78 | .14 | .00 | .14 | .16 | -.04 | .05 | .05 | .22 | .34 | -.13 | .19 | .11 | .24 | .11 | .13 | .08 | .20 | .22 | .15 | .16 | .13 | .14 | .21 |

$N = 781$

Gender: Feminin = 0, Masculin = 1;

OP = perceived organizational promises; EP = perceived employee promises

Correlations > .07, $p < .05$; correlations > .09, $p < .01$; correlations > .12, $p < .001$

Antecedent Variables

The value ***advancement*** is positively related to all dimensions of employer and employee promises and with relational psychological contract features. The only exception exists for perceived promises about work-life balance. ***Autonomy*** is positively related to perceived organizational promises about job content, while ***economic rewards*** is positively related to perceived organizational promises about social atmosphere and perceived employee promises about loyalty and performance and to employee promises in general. The importance of ***group orientedness*** correlates positively with all dimensions of promises, with the exception of promises about career development. The relation between group orientedness and a relational psychological contract is not significant. The extent to which employees have a ***local career strategy*** correlates significantly with relational psychological contract features and with all dimensions of perceived employee promises. There are no significant correlations with perceived promises about employer inducements. ***Locus of control*** correlates positively with the composite scale for perceived employer promises and more specifically with perceived promises relating to job content and career development. There is also a significant positive correlation with the composite scale for perceived employee promises, more specifically with perceived promises about ethical behavior. There is also a significant positive correlation of locus of control with relational psychological contract features. Finally, ***exchange ideology*** correlates negatively with relational psychological contract features, while ***equity sensitivity*** shows a significant positive correlation with this outcome variable. The correlations of both variables with newcomers' promissory beliefs are not significant. Exchange ideology and equity sensitivity are significantly and negatively correlated with each other (r = -.17). The absolute value of this correlation suggests, however, that it is justified to consider both variables as separate constructs (Kline, 1998).

## 7.3. Individual Antecedents of Newcomers' Psychological Contracts

In this section we present the results of the hierarchical regression analyses we have conducted in order to assess the impact of individual antecedents on newcomers' psychological contracts. The results of these analyses are presented in the tables below. Table 7.2 contains the results for the composite scales of promissory beliefs about employer inducements and employee contributions and for relational psychological contract features. Table 7.3 contains the results for the five dimensions of promissory beliefs about employer inducements and Table 7.4. contains the results for the five dimensions of promissory beliefs about employee contributions.

Table 7.2: Hierarchical Regressions Examining the Impact of Individual Antecedents on Composite Measures of Promissory Beliefs about Inducements and Contributions and on Relational Psychological Contract Features[1].

| | Promissory Beliefs about Employer Inducements | | Promissory Beliefs about Employee Contributions | | Relational Psychological Contract Features | |
|---|---|---|---|---|---|---|
| | 1 | 2 | 1 | 2 | 1 | 2 |
| Age | -.109** | -.080* | -.120** | -.103** | .136** | .104** |
| Gender | .077* | .090** | -.027 | -.015 | .004 | -.017 |
| Value Advancement | | .151** | | .208** | | .213** |
| Value Autonomy | | .013 | | -.111** | | -.036 |
| Value Economic rewards | | -.017 | | .048 | | -.016 |
| Value Group orientedness | | .225** | | .178** | | -.028 |
| Local career strategy | | .075* | | .158** | | .310** |
| Locus of control | | .124** | | .072* | | .197** |
| Exchange ideology | | .038 | | -.073* | | -.049 |
| Equity sensitivity | | .012 | | .022 | | .076* |
| $R^2$ | .02 | .14 | .02 | .17 | .02 | .22 |
| Adjusted $R^2$ | .01 | .13 | .01 | .16 | .02 | .21 |
| $R^2_{Change}$ | | .12 | | .15 | | .20 |
| F | 6.50** | 11.69** | 5.84** | 15.13** | 7.10** | 20.95** |
| $F_{Change}$ | | 12.78** | | 17.20** | | 23.98** |

[1] Standardized $\beta$-coefficients are reported

* $p < .05$; ** $p < .01$

Table 7.3: Hierarchical Regressions Examining the Impact of Individual Antecedents on the Content Dimensions of Promissory Beliefs about Employer Inducements [1].

| EMPLOYER INDUCEMENTS: | Career Development | | Job Content | | Social Atmosphere | | Financial Rewards | | Work-Life Balance | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Age | -.166** | -.136** | .096** | .108** | -.131** | -.091* | -.096** | -.064 | -.050 | -.068 |
| Gender | .119** | .111** | .068 | .062 | -.024 | -.001 | .075* | .080* | .022 | .044 |
| Value Advancement | | .195** | | .212** | | .079 | | .105* | | -.075 |
| Value Autonomy | | -.041 | | .056 | | -.117** | | .006 | | .144** |
| Value Economic rewards | | -.098* | | -.069 | | .047 | | .037 | | .000 |
| Value Group orientedness | | .041 | | .096* | | .277** | | .069 | | .202** |
| Local career strategy | | .061 | | .043 | | .051 | | .034 | | .057 |
| Locus of control | | .087* | | .143** | | .078* | | .082* | | .018 |
| Exchange ideology | | .006 | | .050 | | .036 | | .017 | | .016 |
| Equity sensitivity | | -.088* | | .025 | | .035 | | -.070 | | .113** |
| $R^2$ | .04 | .09 | .01 | .11 | .02 | .14 | .01 | .05 | .00 | .17 |
| Adjusted $R^2$ | .04 | .08 | .01 | .10 | .02 | .12 | .01 | .04 | .00 | .06 |
| $R^2$ Change | | .05 | | .10 | | .12 | | .04 | | .07 |
| F | 15.43** | 7.66** | 5.49** | 9.26** | 6.89** | 11.55** | 5.31** | 4.12** | 1.07 | 5.82** |
| F Change | | 5.53** | | 10.07** | | 12.51** | | 3.78** | | 6.99** |

[1] Standardized $\beta$-coefficients are reported

* $p < .05$; ** $p < .01$

As can be seen from these tables there is a significant impact of some of the *demographic control variables* on the psychological contract. In general, *age* has a negative impact on the perception of both employer and employee promises, indicating that older newcomers believe to have exchanged fewer promises with their organization than younger newcomers do. The impact of age on relational psychological contract features, however, is significant and positive. Thus, older newcomers perceive their employment relationship as more relational in nature than younger newcomers. In general, *gender* only has a significant impact on perceived employer promises, more specifically on those promises relating to career development and financial rewards. In both cases men believe more promises have been made than women do.

Table 7.4: Hierarchical Regressions Examining the Impact of Individual Antecedents on the Content Dimensions of Promissory Beliefs about Employee Contributions[1].

| EMPLOYEE CONTRIBUTIONS: | In & Extra Role Behavior | | Flexibility | | Loyalty | | Ethical Behavior | | Employability | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| Age | -.091* | -.068 | -.070 | -.061 | -.063 | -.062 | -.128** | -.108** | -.079* | -.082* |
| Gender | -.065 | -.045 | .054 | .055 | -.032 | -.026 | -.028 | -.018 | .006 | .009 |
| Value Advancement | | .125** | | .241** | | .151** | | .090* | | .169** |
| Value Autonomy | | -.077 | | -.120** | | -.058 | | -.079 | | -.084* |
| Value Economic rewards | | .069 | | -.013 | | .042 | | .078 | | -.029 |
| Value Group orientedness | | .227** | | .088* | | .107** | | .102** | | .091* |
| Local career strategy | | .088* | | .110** | | .233** | | .084* | | .091* |
| Locus of control | | .061 | | .034 | | -.015 | | .149** | | -.017 |
| Exchange Ideology | | -.021 | | -.096** | | -.030 | | -.067 | | -.075* |
| Equity Sensitivity | | .043 | | .004 | | -.013 | | .011 | | .032 |
| $R^2$ | .01 | .13 | .01 | .10 | .01 | .12 | .02 | .10 | .01 | .07 |
| Adjusted $R^2$ | .01 | .12 | .01 | .09 | .00 | .10 | .02 | .09 | .00 | .05 |
| $R^2$ Change | | .12 | | .10 | | .11 | | .08 | | .06 |
| F | 4.98** | 11.42** | 2.84 | 8.63** | 1.93 | 9.61** | 6.69** | 8.04** | 2.35 | 5.12** |
| F Change | | 12.87** | | 10.01** | | 11.47** | | 8.25** | | 6.78** |

[1] Standardized $\beta$-coefficients are reported

* $p < .05$; ** $p < .01$

The inclusion of the individual antecedents in the second step of the regression equation always leads to a significant increase in the percentage of explained variance in the dependent variables. For the general perception of employer promises, the individual antecedents explain 12% of additional variance ($F_{Change}$ 12.78, $p < .001$). For the general perception of employee promises, the individual antecedents explain 15% of additional variance ($F_{Change} = 17.20$, $p < .001$). Finally, the individual antecedents explain 20% of additional variance in relational psychological contract features ($F_{Change} = 23.98$, $p < .001$). As can be seen from Table 7.3 and Table 7.4, the increase in explained variance is also significant for each of the content dimensions of promissory beliefs about employer inducements and employee contributions.

In the following sections we describe the impact of each of the individual antecedents included in our research model on newcomers' psychological contracts in view of our proposed hypotheses. We successively describe the impact of work values (section 7.3.1), career strategy (section 7.3.2), locus of control (section 7.3.3), and exchange orientation (section 7.3.4).

### 7.3.1. Relationship between Work Values and the Psychological Contract

Our analyses provide consistent evidence for the impact of the values advancement and group orientedness on promissory beliefs about employer inducements and employee contributions and on relational psychological contract features. The evidence for the impact of autonomy is mixed, while no effects have been found four economic rewards. We subsequently elaborate on the effects of each of these four types of work values separately.

#### *7.3.1.1. Advancement*

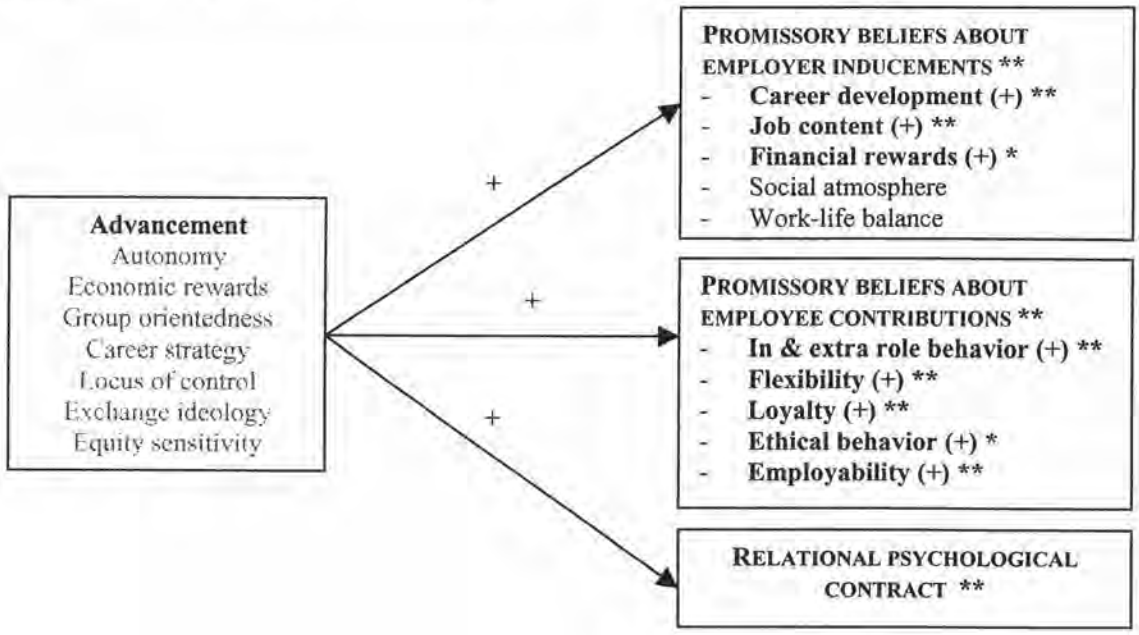
The extent to which employees value advancement in their careers has a significant impact on their ***promissory beliefs about employer inducements*** in general ($\beta = .15$, $p < .001$). When we look at the impact on each of the five content dimensions of organizational promises, we see that this relationship is significant for promises relating to *career development* ($\beta = .20$, $p < .001$), *job content* ($\beta = .21$, $p < .001$), and *financial rewards* ($\beta = .11$, $p < .05$). The impact on promises relating to social atmosphere and work-life balance is not significant. Together these results confirm hypothesis 1A about the positive relationship between advancement and perceived promises about job content and career development.

Employees who value advancement in their careers also have significantly higher ***perceptions of employee promises*** in general ($\beta = .21$, $p < .001$). Looking at the five content dimensions, we see a significant and positive impact *on each of the five types of employee promises*. The impact of advancement ranges from ($\beta = .09$, $p < .05$) for ethical behavior to ($\beta = .24$, $p < .001$) for flexibility. These findings thus confirm hypothesis 1B.

Finally we see that advancement has a significant and positive impact on the extent to which employees describe their ***psychological contract*** as ***relational*** ($\beta = .21$, $p < .001$). This is in line with hypothesis 1C.

Together these findings indicate that individuals who value advancement in their careers not only have stronger expectations towards the inducements their organization will offer them, but that they also show a stronger commitment to their organization in terms of the contributions they believe to have promised. This is also expressed by the more relational type of psychological contract they perceive to have with their employer. The relationship between the value advancement and outcome variables is summarized in Figure 7.1.

Figure 7.1: Relationship between Advancement and Newcomers' Initial Promissory Beliefs



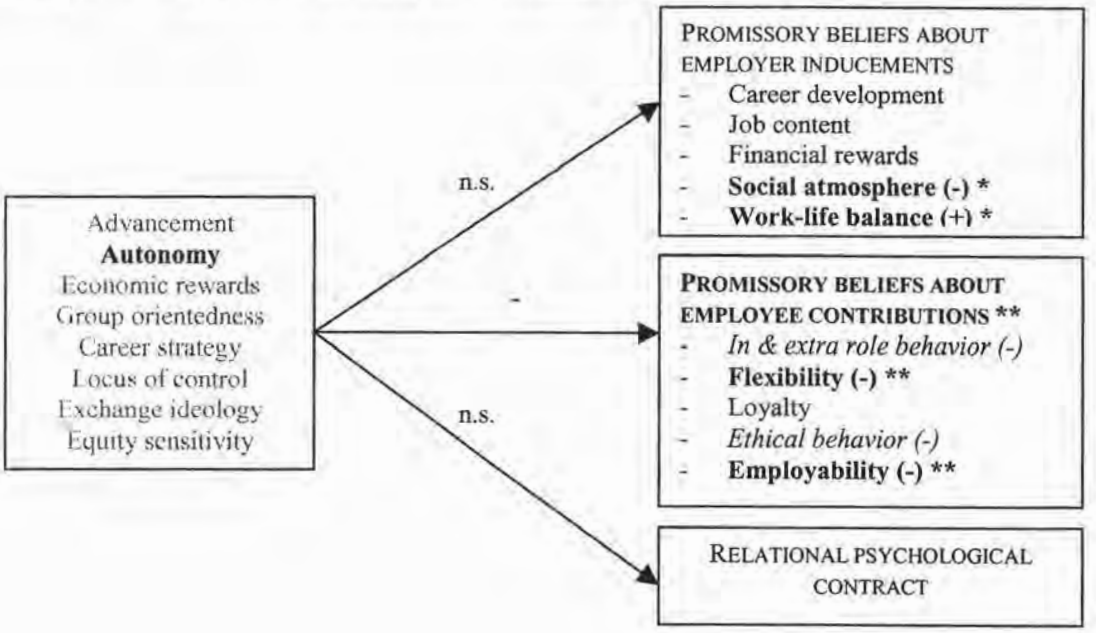

### *7.3.1.2. Autonomy*

As shown in Table 7.2, the extent to which employees value autonomy in their careers is not significantly related to their general ***perceptions of employer promises***. Looking at Table 7.3., we see that there is a significant and negative relationship between autonomy and perceived promises about the social atmosphere at work ($\beta = .-12$, $p < .001$), while there is a significant and positive relationship between autonomy and perceived promises about work-life balance ($\beta = .14$, $p < .001$). The relationships of autonomy with career development and job content go in the proposed directions (negative impact on beliefs about career development and positive impact on beliefs about job content) but they are not significant. Together these findings provide partial support for hypotheses 2A and 2B.

We also hypothesized that autonomy would be negatively related to ***promissory beliefs about employee contributions***. Our results confirm this hypothesis. Autonomy has a significant and negative impact on perceived employee promises in general ($\beta = -.11$, $p < .01$). Looking at the content dimensions of employee promises, we see that this relationship is negative for each of the five dimensions. The relation is significant for perceived promises about *flexibility* ($\beta = -.12$, $p < .01$) and *employability* ($\beta = -.08$, $p < .05$) and marginally significant for perceived promises about *in & extra role behavior* ($\beta = -.08$, $p = .05$) and *ethical behavior* ($\beta = -.08$, $p = .05$). The relationship with loyalty is also negative although not to a significant extent ($\beta = -.06$, $p > .05$). These findings are in line with hypothesis 2C.

Autonomy is negatively related to the perception of a ***relational psychological contract***. However, this relationship is not significant ($\beta = -.04$, $p > .05$), so hypothesis 2D has to be rejected. The relationship between autonomy and promissory beliefs is summarized in Figure 7.2.

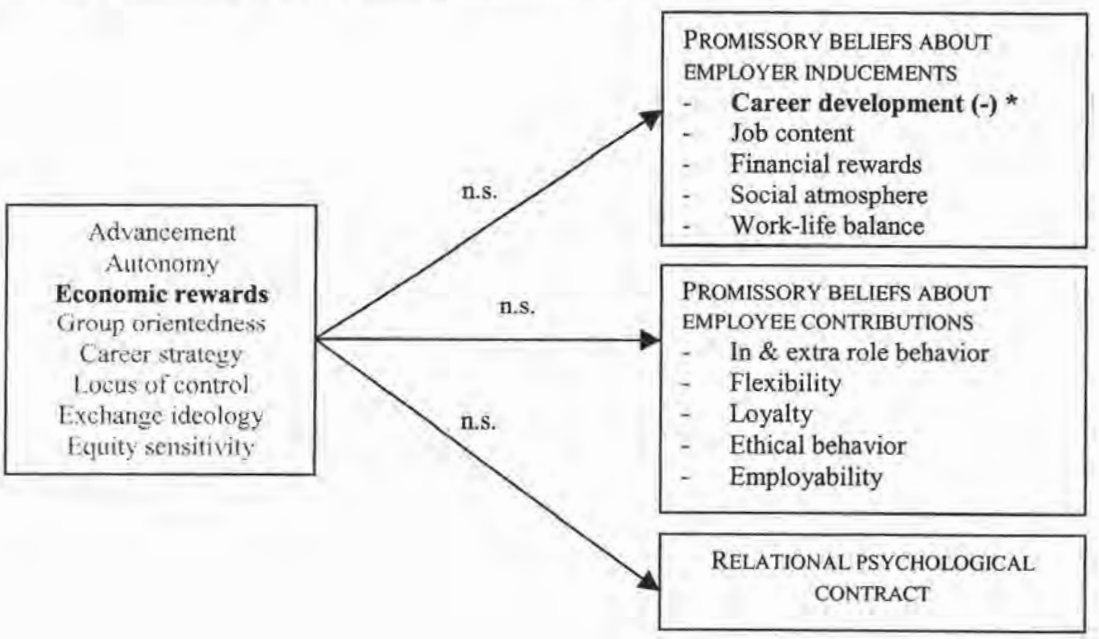
Figure 7.2: Relationship between Autonomy and Newcomers' Initial Promissory Beliefs




### *7.3.1.3. Economic Rewards*

Our hypotheses on the relationship between the importance attached to economic rewards and newcomers' initial promissory beliefs are not confirmed by our data. As shown in Table 7.3, there is no significant influence of the extent to which newcomers value economic rewards on their perceptions of employer promises about *financial rewards* ($\beta$ = .04, $p$ > .05). Thus, hypothesis 3 has to be rejected based on our data. Although this was not hypothesized, there is a significant and negative impact of economic rewards on promissory beliefs about *career development* ($\beta$ = -.10, $p$ = .05).

Figure 7.3: Relationship between Economic Rewards and Newcomers' Initial Promissory Beliefs



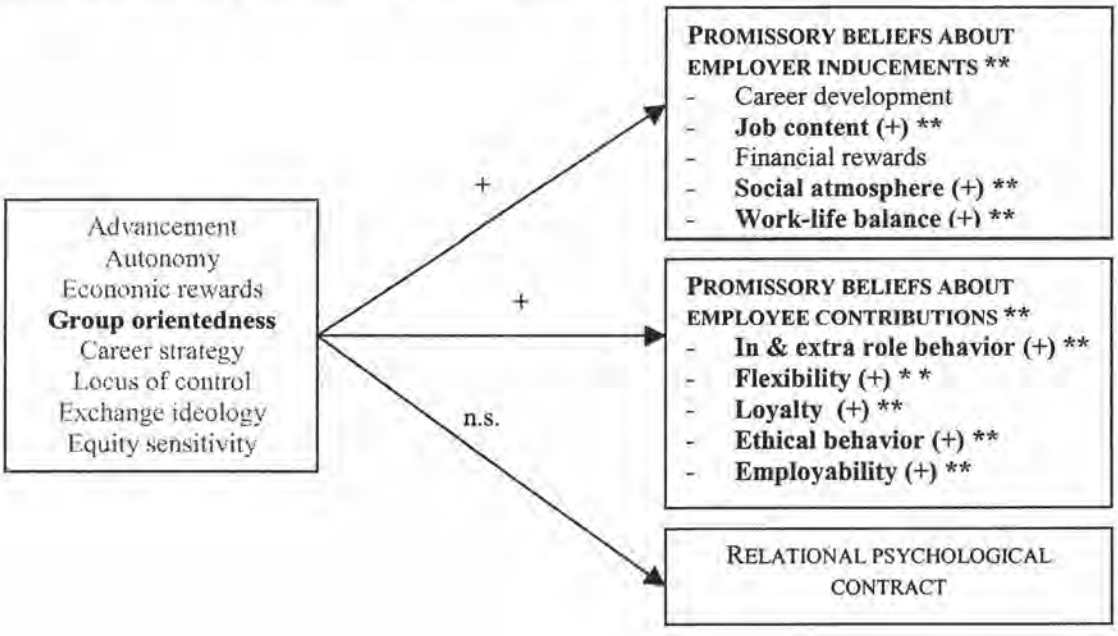
#### *7.3.1.4. Group Orientedness*

The extent to which employees attach importance to the value group orientedness has a significant and positive impact on their global perceptions of ***employer promises*** ($\beta = .23$, $p < .001$). More specifically, we see that this relationship is significant for three of the five content dimensions of employer promises. Group orientedness is significantly and positively related to perceived promises about *social atmosphere* ($\beta = 28$, $p < .001$). This finding is in line with hypothesis 4A. In addition, there is also a significant impact on perceived promises about *job content* ($\beta = .10$, $p < .01$) and *work-life balance* ($\beta = .20$, $p < .001$).

Group orientedness also has a significant impact on the global perception of ***employee promises*** ($\beta = .18$, $p < .001$). This relationship is significant for each of the five content dimensions of employee promises, ranging from ($\beta = .09$, $p < .05$) for flexibility to ($\beta = .23$, $p < .001$) for in & extra role behavior, and it supports hypothesis 4B. This means that employees who attach more importance to attaining social values in their work, believe to have made more promises to their organization than newcomers who attach less importance to this type of values.

Finally, group orientedness is not a significant predictor of the perception of a ***relational psychological contract***, so hypothesis 4C has to be rejected.

Figure 7.4: Relationship between Group Orientedness and Newcomers' Initial Promissory Beliefs



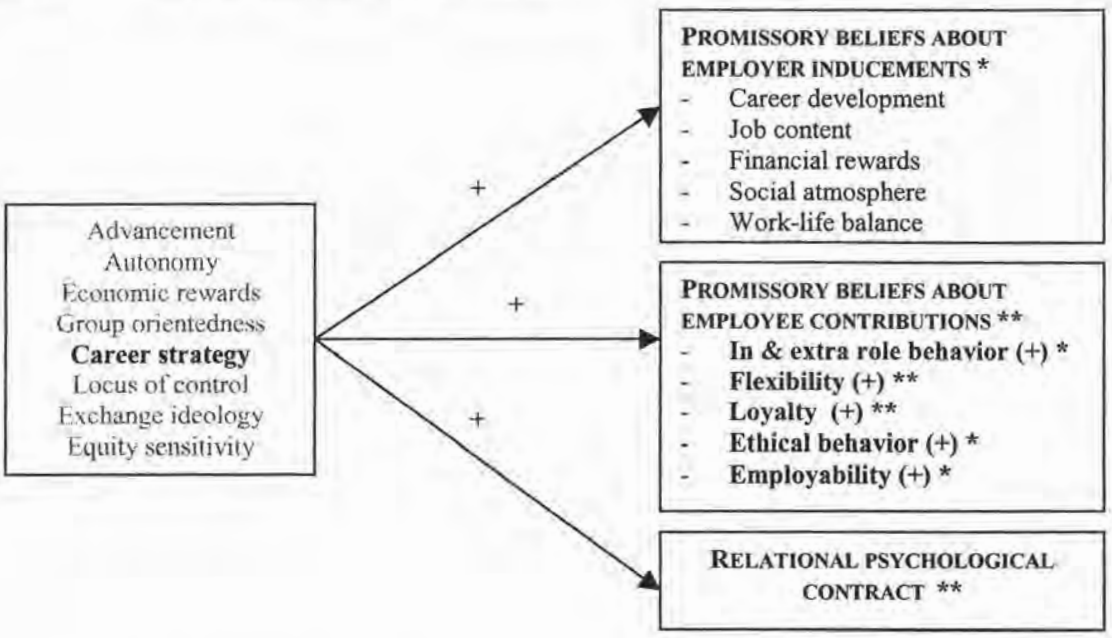

### 7.3.2. Relationship between Career Strategy and the Psychological Contract

In hypothesis 5, we proposed that employees who prefer to develop their careers within their organization, i.e. who want to follow a local career strategy, would have stronger promissory beliefs about employer inducements (hypothesis 5A) and about employee contributions (hypothesis 5B) and that they would have a more relational psychological contract (hypothesis 5C). As can be seen from Table 7.2, local career orientation significantly affects the ***perception of employer promises*** ($\beta = .08$, $p < .05$), the ***perception of employee promises*** ($\beta = .16$, $p < .001$) and the perception of a ***relational psychological contract*** ($\beta = .31$, $p < .001$).

Looking at the content dimensions of the psychological contract, we see that the relationship between local career orientation and perceived organizational promises is not significant for any of the content dimensions considered separately. With regard to the dimensions of employee promises, the impact of career orientation is significant for each of the five dimensions. This effect is the strongest for promises about loyalty ($\beta = .23$, $p < .001$), which is the dimension that most strongly entails a long-time perspective.

Together these findings support hypothesis 5 but they are less strong with respect to perceived employer promises than with respect to perceived employee promises and relational psychological contract features. They indicate that employees who intend to develop their career within their new organization on a longer-term base, have a stronger psychological contract in terms of the perceived exchange of employer and employee promises. They also perceive their employment relationship as more relational in nature than employees who are less focused at developing their career within the organization.

Figure 7.5: Relationship between Career Strategy and Newcomers' Initial Promissory Beliefs



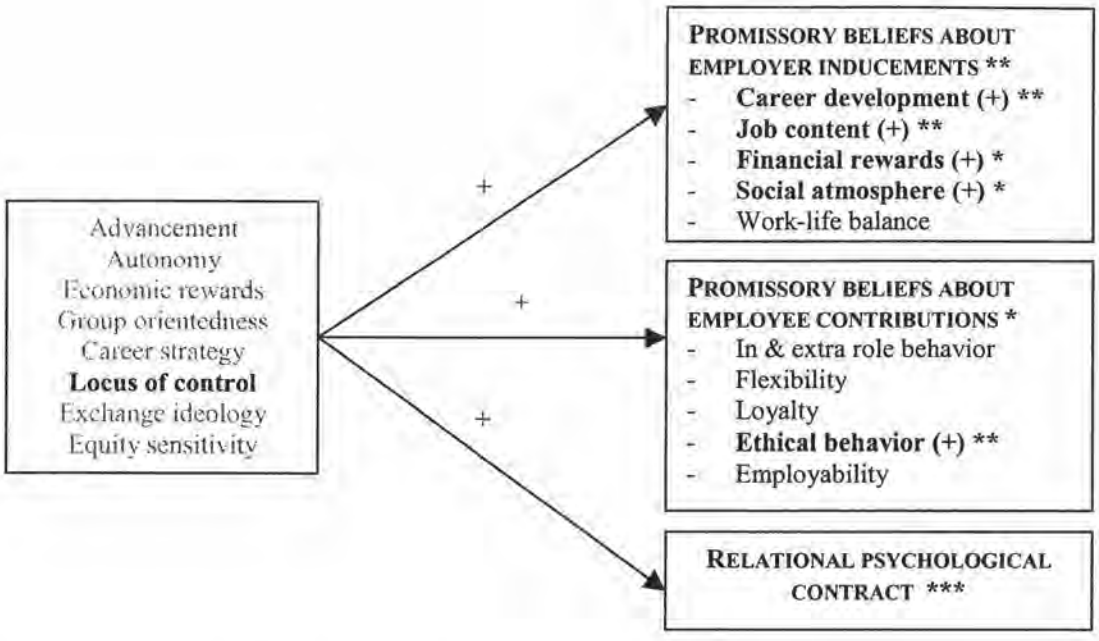

### 7.3.3. Relationship between Locus of Control and the Psychological Contract

In hypothesis 6, we predicted that internal locus of control would be positively related to the perception of employer promises (hypothesis 6A) and employee promises (hypothesis 6B) and to the perception of a relational psychological contract (hypothesis 6C). As shown in Table 7.2, at the general level there is a significant and positive relationship between LOC and ***perceived employer promises*** ($\beta = .12$, $p < .001$). More specifically, as can be seen from Table 7.3, internal LOC has a significant impact on perceived promises about *career development* ($\beta = .09$, $p < .05$), *job content* ($\beta = .14$, $p < .001$), *social atmosphere* ($\beta = .08$, $p < .05$), and *financial rewards* ($\beta = .08$, $p < .05$). These findings provide support for hypothesis 6A.

At the general level, internal LOC also has a significant impact on the ***perception of employee promises*** ($\beta = .07$, $p < .05$), which is in line with our prediction in hypothesis 6B. In Table 7.4 we see that there is only a significant relationship between internal LOC and one content dimension of employee promises, namely *ethical behavior* ($\beta = .15$, $p < .001$). Employees scoring high on internal LOC believe to have made significantly more promises about their ethical behavior than employees scoring low on internal LOC.

Finally, internal LOC significantly and positively affects the perception of a ***relational psychological contract*** ($\beta$ = .20, p < .001), thereby confirming hypothesis 6C.

Figure 7.6: Relationship between Locus of Control and Newcomers' Initial Promissory Beliefs




### 7.3.4. Relationship between Exchange Orientation and the Psychological Contract

We measured both exchange ideology and equity sensitivity as indicators of employees' orientation towards exchange relationships. We successively describe our findings regarding the impact of both constructs on newcomers' psychological contracts.

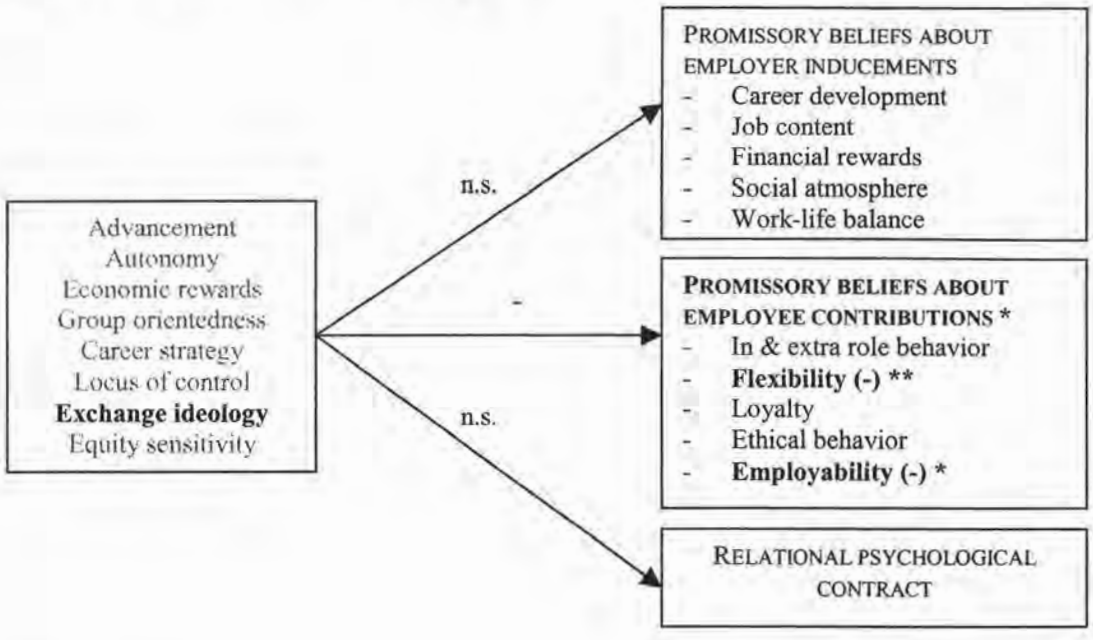
#### *7.3.4.1. Exchange Ideology*

As shown in Table 7.2, there is no significant relationship between exchange ideology and ***promissory beliefs about employer inducements*** in general ($\beta$ = .04, $p$ > .05) as well as at the level of the content dimensions. Thus hypothesis 7A, in which we predicted a positive relationship between exchange ideology and the perception of employer promises, has to be rejected based on our data.

Looking at ***promissory beliefs about employee contributions***, we see that exchange ideology has a significant and negative impact on the general perception of employee promises ($\beta$ = -.07, $p$ < .05). As we have proposed in hypothesis 7B, employees scoring high on exchange ideology indicate to have made fewer promises to their employer than employees scoring low on exchange ideology. More specifically, from Table 7.4 it can be seen that this relationship is significant for employee promises about *flexibility* ($\beta$ = -.10, $p$ < .01) and *employability* ($\beta$ = -.08, $p$ < .05).

Finally, the relationship between exchange ideology and the perception of a ***relational psychological contract*** is negative but not significant ($\beta$ = -.05, $p$ > .05), in contrast with what we predicted in hypothesis 7C.

Figure 7.7: Relationship between Exchange Ideology and Newcomers' Initial Promissory Beliefs



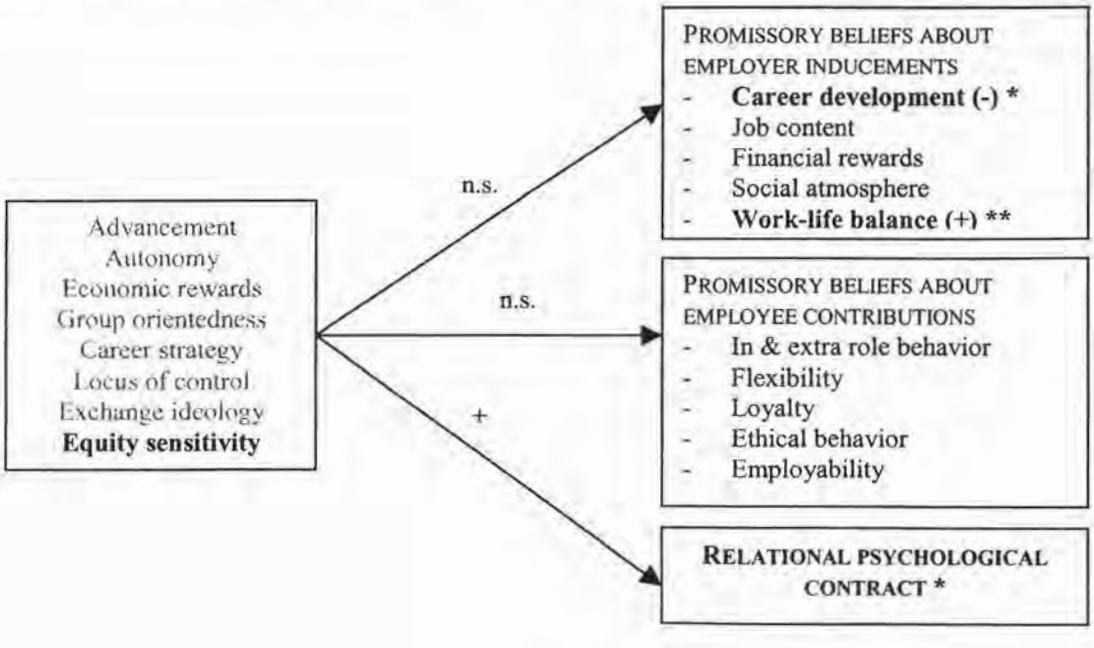

### *7.3.4.2. Equity Sensitivity*

Equity sensitivity has no significant impact on ***promissory beliefs about employer inducements in general*** (cf. Table 7.2). At the level of the content dimensions, there is a significant and positive relationship between equity sensitivity and the perception of organizational promises about work-life balance ($\beta = .11$, $p < .01$), while there is a negative relationship with perceived promises about career development ($\beta = -.09$, $p < .05$).

Contrary to what we predicted in hypothesis 8A, equity sensitivity is not significantly related to ***promissory beliefs about employee contributions.***

Finally there is a significant relationship between equity sensitivity and the perception of a ***relational psychological contract*** ($\beta = .08$, $p < .05$). This suggests that employees who are more concerned with organizational goals perceive their psychological contract as more relational than employees who are more concerned with reaching their personal goals. This is in line with what we predicted in hypothesis 8B.

Figure 7.8: Relationship between Equity Sensitivity and Newcomers' Initial Promissory Beliefs



## 7.4. DISCUSSION

In reply to the need for research on psychological contract formation, our first research question addressed the individual antecedents of newcomers' psychological contracts at organizational entry. In this section we discuss our findings in view of our hypotheses. To answer our first research question we examined the impact of four types of individual characteristics (work values, career strategy, locus of control, and exchange orientation) on the content and features of promissory beliefs entailed in newcomers' psychological contracts at organizational entry. Departing from the conceptualization of the psychological contract as employees' mental model of the terms of their employment relationship, we proposed that these individual antecedents would influence the prevalence of contract terms in newcomers' promissory beliefs as well as the general characteristics of their psychological contract. In Table 7.5 we have summarized our hypotheses together with the extent to which they are supported by our data.

Table 7.5: Overview of our Hypotheses and the Support Obtained from our Empirical Data[1]

| | | |
|---|---|---|
| H1A | Positive relationship between advancement and promissory beliefs about employer inducements in general and more specifically about job content and career development. | Supported |
| H1B | Positive relationship between advancement and promissory beliefs about employee contributions. | Supported |
| H1C | Positive relationship between advancement and relational psychological contract features | Supported |
| H2A | Negative relationship between autonomy and promissory beliefs about career development and social atmosphere | Partial support |
| H2B | Positive relationship between autonomy and promissory beliefs about job content and work-life balance | Partial support |
| H2C | Negative relationship between autonomy and promissory beliefs about employee contributions | Supported |
| H2D | Negative relationship between autonomy and relational psychological contract features | No support |
| H3 | Positive relationship between economic rewards and promissory beliefs about employer inducements relating to financial rewards | No support |
| H4A | Positive relationship between group orientedness and promissory beliefs about employer inducements relating to social atmosphere | Supported |
| H4B | Positive relationship between group orientedness and promissory beliefs about employee contributions | Supported |
| H4C | Positive relationship between group orientedness and relational psychological contract features | No support |
| H5A | Positive relationship between local career orientation and promissory beliefs about employer inducements | Supported |
| H5B | Positive relationship between local career orientation and promissory beliefs about employee contributions | Supported |
| H5C | Positive relationship between local career orientation and relational psychological contract features | Supported |
| H6A | Positive relationship between internal locus of control and promissory beliefs about employer inducements | Supported |
| H6B | Positive relationship between internal locus of control and promissory beliefs about employee contributions | Supported |
| H6C | Positive relationship between internal locus of control and relational psychological contract features | Supported |
| H7A | Positive relationship between exchange ideology and promissory beliefs about employer inducements | No Support |
| H7B | Negative relationship between exchange ideology and promissory beliefs about employee contributions | Supported |
| H7C | Negative relationship between exchange ideology and relational psychological contract features | No support |
| H8A | Positive relationship between benevolence orientation on equity sensitivity continuum and promissory beliefs about employee contributions | No support |
| H8B | Positive relationship between benevolence orientation on equity sensitivity continuum and relational psychological contract features | Supported |

[1]If no content-specific relationships were proposed and significant relationships are found for the global level of inducements or contributions but not for all first-order content dimensions, we consider our hypothesis to be supported.
Partial support is obtained if content-specific relationships were proposed but only some of these are significant.
No support is obtained if none of the specified content-specific relationships are significant or if relationships formulated at the level of composite scales or psychological contract features are not significant.

In the next sections we successively discuss our results regarding the influence of *work values* (section 7.4.1), *career strategy* (section 7.4.2), *locus of control* (section 7.4.3), and *exchange orientation* (section 7.4.4) on newcomers' psychological contracts at organizational entry.

### 7.4.1. Relationship between Work Values and Newcomers' Psychological Contracts

Based on theories about the relationship between work values and employees' perceptions and attitudes in the work situation (e.g. James & James, 1989; London, 1983; Ravlin & Meglino, 1987), we expected that the type of work values newcomers attempt to attain during their careers would affect their psychological contract perceptions. Within psychological contract research this proposition has already been put forward by Rousseau (1995) and Shore & Tetrick (1994) but until recently it had not received any further theoretical or empirical attention. These scholars proposed that depending on their career motives or values newcomers would pay more attention to information about the employment relationship that is relevant for attaining these values. As a result, those promises that are more relevant for value attainment would be more likely to be noticed and remembered by employees. Departing from this general proposition, we formulated hypotheses on the relationship between four types of work values and psychological contract perceptions at organizational entry. These values have previously been found to be predictive of work-related attitudes and behaviors, namely (1) *advancement,* (2) *autonomy,* (3) *economic rewards,* and (4) *group orientedness* (Coetsier & Claes, 1990; James & James, 1989; Sverko & Super, 1995).

In general the results of the present study confirm our proposition that newcomers differ in their initial psychological contract perceptions depending on the type of work values they attempt to attain. While the importance of *advancement* and of *group orientedness* is positively related to both perceived employer and employee promises, the importance of *autonomy* negatively affects employees' perceptions of employee promises. Only the importance of *economic rewards* does not significantly affect employees' perceptions of promises. Looking at the different ***content dimensions*** of employer and employee promises we found that *these work values affect different content dimensions of perceived promises.* With respect to the five types of ***employer promises***, *advancement* significantly and positively affects newcomers' initial perceptions about promises relating to *career development, job content* and *financial rewards. Group orientedness* has a strong positive impact on the perception of promises relating to the *social atmosphere, job content* and *work-life balance. Autonomy* negatively affects perceived promises about the *social atmosphere* but it has a positive impact on perceived promises about *work-life balance.* With respect to the five types of ***employee promises***, both *advancement* and *group orientedness* are significantly and positively related to promises about *all five dimensions of employee contributions.* On the other hand, *autonomy* is negatively related to each of these employee promises, the relationship being significant for promises relating to flexibility and employability, and marginally significant for promises about in & extra role behavior and ethical behavior. Thus, while newcomers who attach more importance to advancement and group orientedness start off with a higher perception of promises about their contributions, which indicates a stronger commitment from the employee side, employees who attach more importance to autonomy initially show weaker commitments to their new organization. Finally, ***psychological contract features*** are only significantly affected by the value advancement. Newcomers who attempt to attain advancement in their careers perceive their psychological contract as more relational in nature than those newcomers for whom advancement is less important. Other value types did not significantly affect these relational features.

Together these findings show that *depending on their work values, certain types of employer promises become more prevalent in newcomers' initial psychological contracts and these types correspond with what we had expected based on the literature on work values.*

With respect to ***advancement***, our findings confirm the thesis that employees who value advancement are focused on the opportunities they receive with respect to their career development and with respect to the intrinsic characteristics of their job and that, in return for these inducements, they are willing to work hard and to take on their responsibilities at work (London, 1983; Ravlin & Meglino, 1987; Schein, 1993). This results in initially higher perceptions of employer and employee promises and in an initial psychological contract that is more relational. This finding corresponds with the results obtained by Van den Brande (2002), who found a positive relationship of the career anchor "managerial competence" with employees' expectations of employer inducements expressing a long-term engagement and with their perceived obligations relating to loyalty. While these results were obtained from a sample of employees with more seniority, our results suggest that this relationship also operates at organizational entry and with a more stringent operationalization of the psychological contract in terms of perceived promises.

For ***autonomy***, theories on work values propose that employees who value autonomy consider it important to have sufficient freedom to organize their life and work as they want and that they often compromise themselves less to the organization (Schein, 1978; 1993). Our study suggests that promissory beliefs about those employer inducements that are most directly related to the job and career itself (i.e. career development, job content and financial rewards), are not significantly affected by the extent to which newcomers value autonomy. On the other hand, there is a negative impact on social atmosphere, the dimension which most strongly expresses an affective link with the organization. We also found a positive impact on perceived promises about work-life balance, which supports our hypothesis that newcomers who value autonomy want to have the freedom to organize their work and private life as they want. The negative relationship between autonomy and promissory beliefs about employee contributions confirms that employees who value autonomy are less willing to make large investments in their employment relationship with a particular employer. But contrary to our expectations, this does not result in a lower perception of relational psychological contract features. Comparing our results with the results obtained by Van den Brande (2002) we see that both are consistent. In her study Van den Brande (2002) found a negative relationship of the career anchor "autonomy" with employees' expectations of long-term engagements from their employer and with their perceived contributions relating to loyalty to and personal investment in the organization.

For ***group orientedness***, our results confirm that employees who attach importance to social values in their work are more concerned with the social aspects of their employment relationship (Elizur *et al.*, 1991). In our study this not only results in stronger promissory beliefs about the social atmosphere at work, but also in stronger commitments from the employee to the organization. This finding corresponds with the notion that individuals who look for social values in their work situation tend to behave more altruistically and are more concerned about other employees (Locke & Taylor, 1990; Ravlin & Meglino, 1987). Contrary to our expectation, however, this stronger commitment does not relate to the perception of a relational psychological contract. In the study conducted by Van den Brande (2002) there was no direct measure of social values included but the operationalization of the career anchor "service" is comparable with the operationalization of group orientedness in our study. If we compare our findings with those obtained by Van den Brande (2002), in her study there was only a significant relationship between service and two dimensions of employee contributions, namely openness and personal investment. For organizational inducements, we cannot compare our findings since Van den Brande (2002) did not include a dimension relating to social atmosphere in her operationalization of employer inducements. She did find a significant positive relationship, however, between the service and the expectation of personal and equal treatment from the organization, which are also two dimensions of employer inducements that are related to the immaterial and social aspects of the employment relationship.

The non-significant relationship between ***economic rewards*** and the perception of organizational promises about financial rewards could be explained in two ways. First, it is possible that this psychological contract dimension has been made more explicit during recruitment and in the legal employment contract than the other dimensions, thereby leaving less room for subjective interpretations and hence for the influence of individual characteristics.

It is possible that newcomers initially base their perceptions about financial rewards mainly on the objective information they have about the financial inducements the organization will offer. Although there is a significant impact of two other antecedent variables, the total proportion of variance explained is smaller for financial rewards than for the other dimensions of employer inducements, which could support this interpretation. Second, this finding could also be explained by the operationalization of the dimension economic rewards. The items used to measure the value economic rewards not only relate to purely financial and material inducements but also to job security. However, when we conduct an a posteriori analysis in which the items relating to security are excluded from the scale, this does not result in a stronger relationship with perceived promises about financial rewards. This suggests that our finding could be explained by the first argument. In the study conducted by Van den Brande (2002), the relationship between the importance of economic rewards and the psychological contract has not been investigated so we have no other empirical information to compare our finding with.

Comparing our results with a related study conducted within our research group, in which we assessed the relationship between work values and promissory beliefs about employer inducements and employee contributions among more senior employees (Buyens *et al.*, 2002), our results indicate that this relationship is more unequivocal among newcomers than among more experienced employees. This suggests that the influence of work values is more apparent at organizational entry, when newcomers only have a limited view on what they can expect of their employment and therefore have more room for personal interpretations. This corresponds with the thesis put forward by London (1983) and Ravlin & Meglino (1987) who argued that the relationship between work values and how employees perceive their work situation is stronger the more this situation is ambiguous or uncertain.

To sum up, our results highlight the importance of recognizing that the psychological contract is multidimensional and that each value type can affect the psychological contract differently. In general, the results support our thesis that work values affect which type of promises become salient to an employee. In other words, individuals differ in the content and features of their psychological contracts and work values are one of the factors that explain these differences.

### 7.4.2. Relationship between Career Strategy and Newcomers' Psychological Contracts

Career strategy is operationalized as the extent to which newcomers attempt to develop their career within the organization, i.e. a local career strategy, versus a career over different organizations (i.e. a careerist or cosmopolitan strategy). Career theory suggests that employees who prefer a long-term career within the organization, compared to those who prefer to change organizations regularly, are willing to engage more strongly in their employment relationship and that they have expectations towards their organization that transcend purely economic or material inducements (Driver, 1994; Rousseau, 1990; Sparrow, 1996). Therefore we proposed that a local career strategy would be positively related to perceived employer promises (H5A), to perceived employee promises (H5B) and to the perception of relational psychological contract features (H5C). These hypotheses are confirmed by our data.

First, we found that newcomers with a local career strategy start off with *higher perceptions about employer and employee promises*. For employer promises this relationship is only significant for the composite scale; the five content dimensions are only marginally affected by local career orientation. For perceived employee promises the impact of local career orientation is more prevalent: here we find a significant relationship both with the composite scale and with each of the five content dimensions. This suggests that newcomers who want to develop their career within their new organization are willing to make more commitments at entry and, although to a lesser extent, they also have higher expectations about the inducements they will receive from their organization.

Second, the strong relationship between local career orientation and *relational psychological contract features* confirms earlier findings obtained by Rousseau (1990). She found that careerism (intention to change employers frequently) was related to the perception of a more transactional psychological contract and negatively affected the perception of a relational contract.

Together our results extend the findings obtained by Rousseau (1990) by showing that individuals' career strategy not only affects the features of their psychological contract, but also the content of their promissory beliefs at entry. As discussed in Chapter 2, the operationalization of transactional versus relational contract features used by Rousseau (1990) is based upon content elements. If we look at her findings in more detail we see that, in contrast to Rousseau, in our study local career orientation affects all types of employee contributions we measured, not only the dimension that explicitly refers to a long-term engagement (i.e. loyalty). Also the global impact of career orientation on employer inducements is not reflected in a differential impact on certain content elements (e.g. career development).

These findings indicate that newcomers not only have different psychological contract perceptions depending on the *type of values* they want to attain, but also as a function of *how they want to attain their career goals*. Comparing this result with prior research conducted within our research group (Buyens *et al.*, 2002) again we see that the relationship between career strategy and psychological contract perceptions is stronger for organizational newcomers than for more experienced employees.

### 7.4.3. Relationship between Locus of Control and Newcomers' Psychological Contracts

Models on the antecedents of the psychological contract (Rousseau, 1995; Shore & Tetrick, 1994) suggest that employees' psychological contract perceptions are not only affected by career-related characteristics or preferences, but also by more general personality characteristics. However, these models do not elaborate on which types of dispositions would be most relevant to be studied in this respect. In our study we used locus of control to measure newcomers' beliefs about the control they have over what happens to them in their work and their career (Kren, 1992). No former evidence exists for the relationship between LOC and the psychological contract, but other research traditions have shown that LOC is one of the most relevant general individual dispositions to explain differences in employee attitudes and behaviors at work (e.g. Judge & Bono, 2001; Judge *et al.*, 2001). Based upon this literature we expected that LOC affects newcomers' initial psychological orientation towards their employment relationship and that this would be reflected their psychological contracts.

First, we expected newcomers scoring high on internal LOC to have stronger promissory beliefs about employer inducements because they consider these inducements as being the result of their own efforts and because they feel more "in control" over the attainment of these results (H6A). This hypothesis is confirmed by our data.

Second, we expected that newcomers with an internal LOC would believe to have made more *promises about their contributions* to the organization because these contributions are, in their perception, instrumental for obtaining results (H6B). This hypothesis was confirmed for the global perception of employee promises and more specifically for the dimension of employee promises relating to ethical behavior. As expected, newcomers with a stronger internal LOC believed to have made more promises to their employer than newcomers with a weaker internal LOC. This confirms Rousseau's (2001) thesis that employees are more likely to make promises if they feel in control over the realization of these promises. It also supports the argument that internals perceive stronger effort – reward contingencies and therefore are more committed and show higher levels of motivation (Goldsmith *et al.*, 2000; Skinner, 1996; Spector, 1982).

Third, we proposed that internal LOC would be positively associated with *relational psychological contract features* because these features are characteristic for an employment relationship that involves more intense

commitments from both parties (H6C). Considering the above arguments that internals are more likely to expect commitments from their organization and to make more commitments to their organization, we proposed that this would also contribute to a stronger relational orientation towards their employment relationship. Our findings confirm our hypothesis. They suggest that internals are more likely to perceive relational features reflecting more efforts from both parties that go beyond the written terms of their employment contract.

Together our findings extend the existing evidence for the role of LOC in explaining employee attitudes and behaviors in the workplace to newcomers' psychological contract perceptions. They show that employees who believe to have personal control over what happens to them not only have more positive attitudes towards their organization in terms of outcome variables like commitment, satisfaction and motivation (e.g. Coleman *et al.*, 1999; Judge & Bono, 2001; Furnham *et al.*, 1994), but also in terms of their initial perceptions of their employment relationship.
Our results show that it is relevant to include more general individual dispositions to explain differences in employees' psychological contract perceptions. They indicate that newcomers' psychological contracts are not only affected by their career motives and goals, but also by dispositions that are not exclusively related to the work situation. Further research could include other types of dispositions, like neuroticism, self-efficacy and self-esteem, i.e. the other dimensions of "core self-evaluations" discerned by Judge and his colleagues (Judge & Bono, 2001; Judge & Larsen, 2001).

### 7.4.4. Relationship between Exchange Orientation and Newcomers' Psychological Contracts

Reciprocity and balance are defining characteristics of the psychological contract, thereby embedding the research field in theories on social exchange. Previous studies have demonstrated that individuals differ in their preference for reciprocity and balance inherent in exchange relationships and that these findings are also applicable to the employment context (e.g. Blader & Tyler, 2000; King & Miles, 1994; Witt & Wilson, 1992). We proposed that exchange orientation would also be predictive of psychological contract perceptions at organizational entry.

First, we proposed that ***exchange ideology*** would have a positive impact on promissory beliefs about employer inducements (H7A) and a negative impact on promissory beliefs about employee contributions (H7B). Only the latter hypothesis is confirmed by our data. This finding suggests that at organizational entry newcomers with a strong exchange ideology are *less willing to make promises about their contributions* to the organization. This corresponds with earlier findings obtained by Coyle-Shapiro & Kessler (1998; 2000a), who found a negative relationship between exchange ideology and more senior employees' perceptions of their obligations towards their organization. Our results extend their finding to the perception of newcomers. They confirm our expectation that newcomers with a strong exchange ideology base their contributions to a stronger extent on what they actually receive from the organization. This makes them less willing to start off with high promises about these contributions because at that moment they do not have any guarantees about what they will receive from their employer.
Contrary to our expectations, exchange ideology had *no significant impact on newcomers' promissory beliefs about employer inducements*. This relationship was not explicitly assessed by Coyle-Shapiro & Kessler but the correlational data reported in their second study (2000a) suggest a significant and positive relationship between both. This is contrary to our correlational findings (cf. Table 7.1): exchange ideology is positively but only weakly correlated with perceived employer promises. Further analyses could assess whether exchange ideology is more predictive in explaining individuals' perceptions of the evaluative facet of the psychological contract or that it should only be considered as a moderator of the relationship between employer inducements and employee outcomes. The same holds for the *lack of a significant relationship between exchange ideology and relational psychological contract features*, as proposed in hypothesis 7C.

Second, with respect to ***equity sensitivity*** we expected that newcomers who are more benevolent, i.e. more concerned with organizational goals, would be more willing to make *promises about their contributions* than newcomers who are more entitled, i.e. more concerned with their personal goals (H8A). This hypothesis was based on the observation that benevolent employees engage more frequently in extra-role behavior and obtain better performance evaluations, regardless of the inducements received from their organization, than equity sensitive of entitled employees (Bing & Burroughs, 2001; Blakely *et al.*, 2001). However, this hypothesis was not confirmed by our data. Because we did not use the full equity sensitivity scale as developed by Huseman *et al.* (1985) it might be possible that this difference could have affected our findings. Another explanation is that the influence of equity sensitivity on employee contributions only becomes clear if we address the evaluative facet of the psychological contract. This should be investigated in further analyses. We also expected that benevolence would be positively associated with *relational psychological contract features* (H8B). The latter proposition was confirmed by our data. It supports the argument that benevolent employees are more focused upon communal norms than on exchange norms within their employment relationship (Blader & Tyler, 2000).

### 7.4.5. Assessment of the Impact of Subject Attrition on the Obtained Relationships

In Chapter 6 we have outlined the importance of assessing the possible biasing effects of subject attrition on our empirical results. The univariate analyses we conducted and which were reported in section 6.6.1 tested for the effects of attrition on descriptive statistics. They showed that, with respect to the variables included in the analysis of our first research question, there is little evidence for systematic differences in subjects' mean scores depending on their continued participation in the subsequent data collection waves.

As suggested by Little *et al.* (2000) it is also important, in addition to the analyses of descriptive statistics, to assess possible effects of attrition bias on structural relationships between variables. Because the design of our study made it possible to test for systematic differences in structural relationships between individual antecedents and newcomers' initial psychological contracts depending on their continued participation in the whole study, we re-conducted our regression analyses while only using the sample of respondents having participated in the full study ($N = 333$). The results of these analyses suggest that we can be confident that the obtained relationships are not characteristic to the initial sample. Although there is not a complete correspondence with respect to the magnitude or significance level of obtained relationships, comparison of all standardized $\beta$-coefficients indicates that these relationships go in the same direction and that for the majority the relationships are of comparable strength. This information supports the validity of our results.

## 7.5. Summary and Conclusions

In this chapter we have presented the results of our first research question, which addressed the relationship between newcomers' individual characteristics and the content and features of their psychological contracts at organizational entry. Based upon our review of relevant literature in Chapter 3 and the hypotheses formulated in Chapter 5, we assessed the impact of four types of individual characteristics (work values, career strategy, locus of control and exchange orientation) on the content of newcomers' initial promissory beliefs about employer inducements and employee contributions and on their psychological contract features. This was done by conducting a series of hierarchical regression analyses on composite measures of promissory beliefs and psychological contract features and on the content dimensions of promissory beliefs.

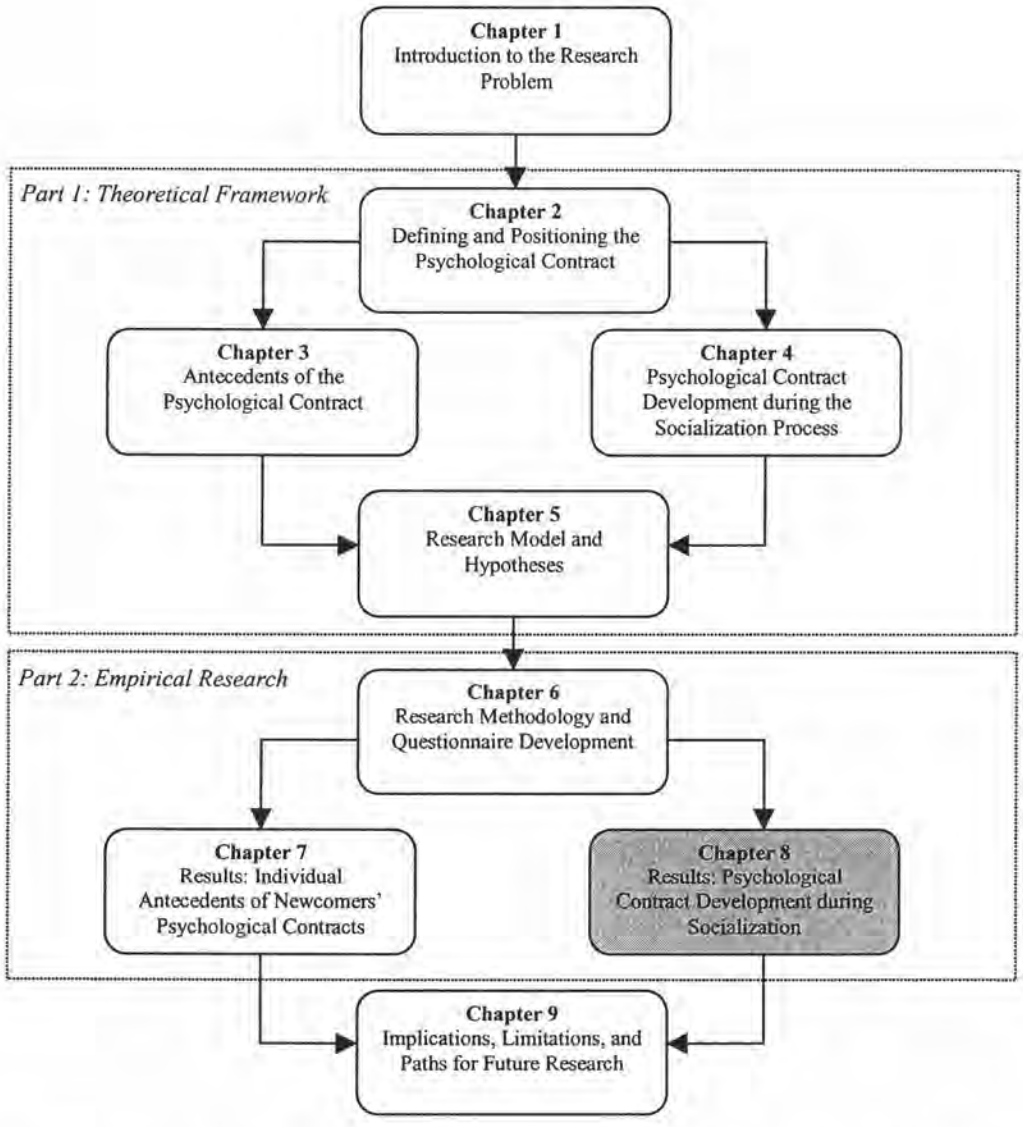
Summarizing our findings we conclude that there is evidence that individual characteristics affect the type of promissory beliefs prevalent in newcomers' psychological contracts as well as their psychological contract features. Our findings support most of our hypotheses for three of the antecedents included in our model (work values, career strategy and locus of control) while providing partial support for the impact of exchange orientation. Together they confirm the conceptualization of the psychological contract as an inherently subjective construct. They indicate that not only career-relevant individual preferences such as work values and career

strategy exert influence upon newcomers' initial perceptions of the terms of their employment relationships but that there are also effects of more general individual dispositions such as locus of control. In this sense, our findings provide a concrete application of more general theories on the role of individual dispositions in the workplace and they show that the basic constructs put forward in these theories are not only relevant to explain differences in employee attitudes and behaviors but also in their initial psychological contract perceptions.
Moreover, the differential impact of these individual characteristics on the different content dimensions of employer and employee promises suggests that the psychological contract is a multidimensional construct and that it is relevant to take these dimensions into account when studying individual differences in psychological contracts. They also provide evidence for the discriminant validity of the content-facet and the features-facet of the psychological contract.

While these results have addressed the antecedents of newcomers' psychological contracts in a more static way, in the following chapter we will focus on the dynamics of psychological contract development over time during the socialization process.

CHAPTER STRUCTURE

# Chapter 8
# Results: Psychological Contract Development during Socialization




*In this chapter we present the results of our longitudinal study on psychological contract development during the socialization process. In section 8.1, the results of our measurement invariance tests, descriptive statistics and sample characteristics are presented. Subsequently, we present the results for each of our three research questions. Section 8.2 contains the results for the changes in newcomers' psychological contract perceptions, evaluations and information-seeking behaviors. In section 8.3 we present the results for changes in perceived promises as a function of newcomers' evaluations of actual experiences[1]. In section 8.4 we describe our findings with respect to the role of information seeking in psychological contract development. Section 8.5 contains a discussion of our results in view of our research hypotheses. Finally, in section 8.6 we summarize our findings and we make some general conclusions.*

[1]Two papers addressing this research question are currently under review: De Vos, A., Buyens, D., & Schalk, R. (2002). Psychological contract development during organizational socialization: Adaptation to reality and the role of reciprocity. *Under review for publication in Journal of Organizational Behavior*; and De Vos, A. & Buyens, D. (2002). Veranderingen in het psychologisch contract tijdens de socialisatieperiode: Aanpassing aan de realiteit en de invloed van wederkerigheid. *Paper under review for publication in Gedrag & Organisatie.*

## 8.1. MEASUREMENT INVARIANCE TESTS AND DESCRIPTIVE STATISTICS

In this section we first summarize the results of the longitudinal measurement invariance tests we have conducted (section 8.1.1). This is followed by an overview of the research sample involved in our longitudinal analyses and the descriptive statistics of all variables included in the analyses (section 8.1.2).

### 8.1.1. Longitudinal Measurement Invariance Tests

Before we can start our longitudinal analyses it is necessary to assess the measurement invariance of our constructs. As outlined in Chapter 6 (section 6.6.2.1), for each construct we tested the configural and factorial invariance of measures over time following the procedures discussed by Chan (1998), Chan & Schmitt (2000), Lance *et al.*, (2000), and Vandenberg & Lance (2000). These tests were conducted separately for each psychological contract dimension of (1) promissory beliefs, (2) actual experiences, (3) evaluation of promises, and (4) information seeking. If the constraint of full factorial invariance resulted in a significant decrease in model fit, subsequent analyses were conducted to assess partial invariance by freeing certain factor loadings, following the procedure proposed by Byrne (2001), Byrne *et al.* (1989), and Cheung & Rensvold (1999).

The first model assessed ***configural invariance*** by testing if the unidimensional structure of a measure generalizes over time. In this model the items are constrained to load only on the respective measurement occasion factor. The factor loading for the first item within each measurement occasion was fixed equal to 1.0 to set the scale of the respective factor. The intercept for the first item within each measurement occasion was fixed equal to 0.0 to identify the mean of the respective factor. Based on Tisak & Meredith (1990) and Vandenberg & Lance (2000), same-item residuals were allowed to covary across measurement occasions since it is an implicit assumption that the unique factors are uncorrelated with themselves within occasions, but are correlated with the same unique factor across occasions. Factor loadings, intercepts, uniquenesses, factor variances, and covariances were freely estimated and were allowed to be heterogeneous across measurement occasions. The second model assesses ***factorial invariance*** by imposing additional restrictions to the factor loadings. In this model factors loadings on like items are specified to be equal across measurement occasions. This model is hierarchically nested under the configural invariance model. Using the $\chi^2_{\text{difference}}$ test we assessed if these additional restrictions lead to a significant decrease in model fit. If this was the case, subsequent tests for ***partial invariance*** were conducted following a logic procedure in which invariance is first assessed for each pair of data collection waves. In a second step loadings are tested for equivalence one at a time and invariant loadings are constrained as invariant in each subsequent test for other loadings.

In Appendix 8.1 we present the results for all measurement invariance tests we have conducted. In general, these tests support the assumptions of configural and factorial invariance. All configural invariance tests show good model fit. If the factorial invariance constraints were imposed to these models, for most dimensions this did not result in significant decreases in model fit, supporting the assumption of factorial invariance. For only a few dimensions some constraints had to be released in order to obtain sufficient model fit. For ***perceived promises***, this was the case for employer promises relating to job content and work-life balance and for employee promises relating to role behavior and loyalty. For ***actual experiences***, only partial measurement invariance was obtained for inducements relating to social atmosphere and financial rewards. For ***perceived fulfillment of promises***, there was partial measurement invariance for evaluation of promises relating to job content and social atmosphere. Finally, for ***information seeking*** there was partial measurement invariance for the dimensions career development and financial rewards.

Since *at least* partial measurement invariance has to be obtained in order to proceed with longitudinal analyses (Bagozzi & Edwards, 1998; Byrne *et al.*, 1989) the results of these measurement invariance tests suggest that we can be confident continuing with assessing changes in psychological contract variables over time and with

examining structural relationships among these constructs. Moreover, these invariance tests provide additional support for the validity of our psychological contract scales.

### 8.1.2. Sample Characteristics and Descriptive Statistics

We conducted our longitudinal analyses using data collected at ***four data collection waves***: T1 (4 weeks after entry), T2, (3 months after entry) T3 (6 months after entry), and T4 (12 months after entry). They are based on a total sample of ***333 newcomers*** representing six organizations (i.e. those newcomers who participated at each of these four data collection waves). They represent twenty-six percent of the originally contacted sample within these six organizations, thirty-four percent of the initial respondents at T0 and forty-six percent of the respondents at T1. Respondents' mean age was 26.96 years (S.D. = 5.77), with an average of 4.07 years of prior work experience (S.D. = 5.66). Sixty-five percent of the respondents are male. Respondents from organizations A and F were not included given the small sample size and because preliminary repeated measures analyses with organization included as a between subject variable, showed that these newcomers deviated significantly from the others for a number of relationships.

The ***research variables*** included in our longitudinal analyses are: (1) *promissory beliefs* about employer inducements and employee contributions (measured at T1, T3 and T4), (2) *actual experiences* with respect to the inducements received and contributions made (measured at T1, T3 and T4), (3) *perceived fulfillment of promises* about inducements and contributions (measured at T1, T3 and T4), and (4) *information seeking* about inducements and contributions (measured at T1, T2, T3 and T4). Depending on the type of analysis, we used the five first-order content dimensions of employer inducements and the five first-order content dimensions of employee contributions, or the second-order composite scales for inducements and for contributions (except for information seeking; for this variable all analyses were conducted with reference to content dimensions). At T4 we also measured general satisfaction and met expectations.

In the tables below we summarize the means and variances for each of the psychological contract measures at each data collection wave. In the interest of space, the correlation matrix representing correlations between all time-varying and time invariant variables included in our longitudinal design is not presented here but can be found in Appendix 8.2.

Table 8.1: Means and Variances for Promissory Beliefs at T1, T3 and T4 ($N = 333$)

| | T1 | | T3 | | T4 | |
|---|---|---|---|---|---|---|
| | **Mean** | **Variance** | **Mean** | **Variance** | **Mean** | **Variance** |
| **EMPLOYER INDUCEMENTS** | | | | | | |
| Career Development | 3.87 | .73 | 3.83 | .63 | 3.89 | .59 |
| Job Content | 3.71 | .50 | 3.74 | .35 | 3.81 | .35 |
| Social Atmosphere | 3.39 | .80 | 3.50 | .70 | 3.48 | .76 |
| Financial Rewards | 3.19 | .53 | 3.09 | .59 | 3.21 | .57 |
| Work-Life Balance | 3.27 | .66 | 3.33 | .69 | 3.42 | .63 |
| *Composite Scale* | 3.46 | .52 | 3.48 | .54 | 3.55 | .35 |
| **EMPLOYEE CONTRIBUTIONS** | | | | | | |
| In- & Extra-Role Behavior | 3.66 | .64 | 3.76 | .53 | 3.81 | .47 |
| Flexibility | 2.61 | .67 | 2.74 | .66 | 2.75 | .65 |
| Ethical Behavior | 3.83 | .83 | 3.87 | .70 | 3.96 | .61 |
| Loyalty | 2.15 | 1.06 | 2.42 | 1.36 | 2.36 | 1.25 |
| Employability | 2.78 | 1.34 | 2.83 | 1.13 | 2.76 | 1.21 |
| *Composite Scale* | 3.15 | .67 | 3.30 | .65 | 3.28 | .61 |

Table 8.2: Means and Variances for Actual Experiences at T2, T3 and T4 ($N = 333$)

| | T2 | | T3 | | T4 | |
|---|---|---|---|---|---|---|
| | Mean | Variance | Mean | Variance | Mean | Variance |
| **EMPLOYER INDUCEMENTS** | | | | | | |
| Career Development | 3.55 | .60 | 3.17 | .81 | 3.18 | .66 |
| Job Content | 3.80 | .51 | 3.75 | .56 | 3.73 | .45 |
| Social Atmosphere | 4.00 | .46 | 3.93 | .55 | 3.87 | .52 |
| Financial Rewards | 2.86 | .64 | 2.73 | .77 | 2.83 | .65 |
| Work-Life Balance | 3.78 | .51 | 3.67 | .66 | 3.77 | .60 |
| *Composite Scale* | 3.61 | .48 | 3.48 | .54 | 3.50 | .51 |
| **EMPLOYEE CONTRIBUTIONS** | | | | | | |
| In- & Extra-Role Behavior | 4.15 | .20 | 4.18 | .22 | 4.22 | .23 |
| Flexibility | 3.29 | .75 | 3.24 | .72 | 3.32 | .81 |
| Ethical Behavior | 4.39 | .25 | 4.33 | .27 | 4.34 | .29 |
| Loyalty | 3.93 | 1.04 | 3.83 | 1.23 | 3.66 | 1.2 |
| Employability | 3.18 | 1.35 | 3.09 | 1.45 | 3.10 | 1.34 |
| *Composite Scale* | 3.89 | .43 | 3.85 | .47 | 3.85 | .48 |

Table 8.3: Means and Variances for Fulfillment of Promises at T2, T3 and T4 ($N = 333$)

| | T2 | | T3 | | T4 | |
|---|---|---|---|---|---|---|
| | Mean | Variance | Mean | Variance | Mean | Variance |
| **EMPLOYER INDUCEMENTS** | | | | | | |
| Career Development | 3.09 | .68 | 2.95 | .70 | 2.78 | .78 |
| Job Content | 3.23 | .58 | 3.31 | .58 | 3.27 | .51 |
| Social Atmosphere | 3.47 | .59 | 3.58 | .65 | 3.47 | .70 |
| Financial Rewards | 2.96 | .71 | 2.81 | .77 | 2.77 | .69 |
| Work-Life Balance | 3.38 | .50 | 3.43 | .57 | 3.44 | .66 |
| *Composite Scale* | 3.29 | .55 | 3.28 | .58 | 3.20 | .57 |
| **EMPLOYEE CONTRIBUTIONS** | | | | | | |
| In- & Extra-Role Behavior | 3.73 | .21 | 3.76 | .20 | 3.80 | .21 |
| Flexibility | 3.58 | .55 | 3.54 | .48 | 3.58 | .49 |
| Ethical Behavior | 3.88 | .18 | 3.88 | .22 | 3.89 | .25 |
| Loyalty | 3.79 | .55 | 3.73 | .65 | 3.64 | .63 |
| Employability | 3.31 | .89 | 3.34 | .81 | 3.40 | .21 |
| *Composite Scale* | 3.72 | .41 | 3.73 | .41 | 3.73 | .43 |

Table 8.4: Means and Variances for Information Seeking at T1, T2, T3 and T4 ($N = 333$)

| | T1 | | T2 | | T3 | | T4 | |
|---|---|---|---|---|---|---|---|---|
| | Mean | Variance | Mean | Variance | Mean | Variance | Mean | Variance |
| **EMPLOYER INDUCEMENTS** | | | | | | | | |
| Career Development | 2.12 | .61 | 1.99 | .59 | 1.94 | .49 | 1.91 | .53 |
| Job Content | 3.48 | .66 | 3.11 | .80 | 2.77 | .69 | 2.60 | .76 |
| Social Atmosphere | 2.73 | .71 | 2.47 | .75 | 2.32 | .68 | 2.20 | .76 |
| Financial Rewards | 1.80 | .44 | 1.77 | .42 | 1.79 | .41 | 1.71 | .48 |
| Work-Life Balance | 2.08 | .51 | 1.96 | .51 | 1.88 | .50 | 1.84 | .57 |
| **EMPLOYEE CONTRIBUTIONS** | | | | | | | | |
| In- & Extra-Role Behavior | 2.57 | .53 | 2.33 | .54 | 2.27 | .49 | 2.14 | .52 |
| Flexibility | 2.08 | .72 | 2.03 | .61 | 2.00 | .63 | 1.93 | .52 |
| Ethical Behavior | 1.93 | .63 | 1.81 | .58 | 1.69 | .49 | 1.68 | .48 |
| Loyalty | 1.48 | .43 | 1.55 | .47 | 1.53 | .41 | 1.54 | .44 |
| Employability | 2.41 | .69 | 2.21 | .55 | 2.10 | .54 | 1.91 | .50 |

## 8.2. CHANGES IN NEWCOMERS' PSYCHOLOGICAL CONTRACTS AS A FUNCTION OF TIME

***What are the changes in newcomers' psychological contracts occurring over time during socialization?***

Our first research question on psychological contract development addresses the basic nature of changes in newcomers' psychological contracts (perceived promises, actual experiences and perceived fulfillment) and in their contract-related information-seeking behaviors. Obtaining information on the nature of the change trajectory of these constructs is a necessary first step before other questions about antecedents and outcomes of this change process can be addressed (Willet & Sayer, 1994). In this section we start with a description of our analytical choices (8.2.1). This is followed by a systematic description of the growth models for changes in promissory beliefs (8.2.2), changes in actual experiences (8.2.3), changes in the evaluation of promise fulfillment (8.2.4), and changes in contract-related information seeking (8.2.5). In accordance with other LGM studies (e.g. Chan & Schmitt, 2000; Lance *et al.*, 2000) we will always report global model fit indices of estimated growth curves as well as growth parameters for the retained growth models, and we will give a graphical representation of change trajectories based on mean scores.

### 8.2.1. Analytical Choices

We examined the univariate changes in psychological contracts using latent growth modeling (LGM). As outlined in Chapter 6, using LGM allows us to explicitly model the nature of intraindividual change that occurs over time in the process of newcomer psychological contract development and to examine interindividual differences in intraindividual change. The analyses we present here are based on the approach followed by Chan & Schmitt (2000) who used LGM to assess changes in newcomer proactivity and adaptation during organizational entry.

As explained in section 6.6.2.2, the two parameters estimated in LGM are the intercept and shape of the change trajectory. For both parameters, information about mean and variance is obtained. The *intercept factor mean* corresponds to the initial status of the variable. It is defined by fixing all the factor loadings of the repeated measures to 1 (Meredith & Tisak, 1990). The *variance* of the intercept factor represents interindividual differences in initial status. The *shape factor* corresponds to the rate of change in the focal variable, that is the rate of increase or decrease over time. The *mean* of the shape factor represents the mean rate of change in the focal variable while the *variance* of the shape factor represents interindividual differences in this rate of change. The factor loadings of the repeated measures are a mixture of fixed and freely estimated parameters that define the shape of the change trajectory over time. At least two shape factor loadings must be fixed to two different values to identify the model (Meredith & Tisak, 1990). The remaining factor loadings can either be freely estimated or fixed to specific values. Freely estimating them amounts to modeling unspecified trajectories, where the shape of the trajectory is allowed to be determined by the data (Chan, 1998). A specified trajectory model corresponding to the hypothesized pattern of change is obtained by fixing the shape factor loadings accordingly.

The growth models we have estimated in order to describe changes in newcomers' psychological contracts are called ***univariate*** or ***unconditional growth curves*** (Duncan *et al*, 1999) since they include no predictors or outcome variables. We always estimated and compared three models: (1) an optimal growth model, (2) a linear growth model, and (3) a no growth model. In the *optimal growth model* the loading from the shape factor to the focal variable at the third and /or fourth measurement occasion was freely estimated while in the *linear model* this loading was fixed to specify a straight line growth over the three or four time points. The *no growth model* specifies that no growth occurred at all over time (i.e., a horizontal trajectory), by constraining all shape parameters to zero. This model is the most restricted model. Both the linear and no growth model are nested

under the optimal growth model. We used the $\chi^2_{difference}$ test to assess whether these more restricted models lead to a significant decrease in model fit. The growth model that most parsimoniously described changes over time was retained if the estimated parameters reflected the observed means and variances sufficiently. If a model is a good representation of the data then the intercept factor mean should correspond approximately to the observed mean at initial status, while the sum of the intercept factor mean and the product of the shape factor mean with its loading on the last time point should approximately correspond to the observed mean at the last time point (Duncan *et al.*, 1999).

All models were estimated using the composite scales, whereby error variances were constrained to be equal over time (Duncan *et al.*, 1999). We decided to work with composite scales (i.e. first order factor growth model) instead of a second order factor growth model since this allows us to build on these univariate models when estimating multivariate or conditional growth models in later stages without violating the norm of having a subject-to-parameter ratio of at least 5/1. Moreover, working with first order growth models is a common practice in research using LGM analyses (e.g. Chan & Schmitt, 2000; Duncan *et al.*, 1999).

### 8.2.2. Changes in Promissory Beliefs

The three alternative growth models (optimal, linear and no growth) were fitted for perceived promises about the five dimensions of employer inducements and the five dimensions of employee contributions. In the following subsections we subsequently describe the growth models for changes in perceived promises about employer inducements (section 8.2.2.1.) and the growth models for changes in perceived promises about employee contributions (section 8.2.2.2.).

#### *8.2.2.1. Changes in Perceived Promises about Employer Inducements*

The model fit indices for the three fitted growth models are represented in Table 8.5. As can be seen from this table, with the exception of career development, the restrictions implied by the no-growth model always lead to a significant decrease in model fit compared to the optimal growth model. Based on the $\chi^2_{difference}$ test the *no-growth* model was retained for *career development*, indicating that during the first year of employment newcomers' perceptions of employer promises relating to career development do not change to a significant extent. For promises relating to *job content*, *social atmosphere* and *work-life balance* the $\chi^2_{difference}$ tests show that these change trajectories do not follow a linear pattern. Therefore, for these inducements the *optimal growth model* was retained. For *financial rewards*, the $\chi^2_{difference}$ tests suggest a linear change trajectory although the RMSEA index of the linear change model suggests poor model fit. Also a linear change trajectory does not correspond with the differences between the observed means at the three time points (see Table 8.1 and Figure 8.1). Moreover, for both the linear and the optimal growth model the shape factor mean turned out to be non-significant and the discrepancy between intercept factor mean and observed mean at T1 suggests that changes in financial rewards cannot be adequately represented by the proposed growth models. Comparison of mean scores for financial inducements at the three time points suggest that there is a decrease in perceived promises from T1 to T3 and an increase in perceived promises at an equal rate from T3 to T4. To model this curvilinear form a quadratic growth model would be more suitable but this technically requires a minimum of four time points, so it could not be applied to our data. Therefore we decided to retain the *no-growth model for financial rewards*.

Table 8.5: Model Fit Indices for Latent Growth Models of Perceived Promises about Employer Inducements

| | $\chi^2$ | df | $\chi^2$/df | $\Delta\chi^2$ | $\Delta$df | TLI | CFI | RMSEA |
|---|---|---|---|---|---|---|---|---|
| **CAREER DEVELOPMENT** | | | | | | | | |
| M1: Optimal Growth | 3.209 | 2 | 1.604 | | | .999 | 1.000 | .043 |
| M2: Linear Growth | 6.658 | 3 | 2.219 | 3.449 | 1 | .998 | .999 | .061 |
| ***M3: No Growth*** | 12.501 | 6 | 2.084 | 9.292 | 4 | .998 | .998 | .057 |
| **JOB CONTENT** | | | | | | | | |
| ***M1: Optimal Growth*** | 5.540 | 2 | 2.770 | | | .997 | .999 | .044 |
| M2: Linear Growth | 22.595* | 3 | 7.532 | 17.055* | 1 | .990 | .995 | .116 |
| M3: No Growth | 41.702* | 6 | 6.950 | 36.162* | 4 | .991 | .991 | .134 |
| **SOCIAL ATMOSPHERE** | | | | | | | | |
| ***M1: Optimal Growth*** | 2.230 | 2 | 1.115 | | | 1.000 | 1.000 | .019 |
| M2: Linear Growth | 10.146* | 3 | 3.382 | 7.917* | 1 | .996 | .998 | .085 |
| M3: No Growth | 23.008* | 6 | 3.853 | 20.779* | 4 | .993 | .995 | .107 |
| **FINANCIAL REWARDS** | | | | | | | | |
| M1: Optimal Growth | 18.892* | 2 | 9.446 | | | .984 | .995 | .160 |
| M2: Linear Growth | 18.894* | 3 | 6.298 | 0.002 | 1 | .990 | .995 | .126 |
| ***M3: No Growth*** | 30.995* | 6 | 5.159 | 12.062* | 4 | .992 | .992 | .112 |
| **WORK-LIFE BALANCE** | | | | | | | | |
| ***M1: Optimal Growth*** | 6.074* | 2 | 3.037 | | | .996 | .999 | .078 |
| M2: Linear Growth | 11.992* | 3 | 3.997 | 5.918* | 1 | .994 | .997 | .095 |
| M3: No Growth | 32.625* | 6 | 5.438 | 26.551* | 4 | .992 | .992 | .116 |

* $p < .05$

In Table 8.6 the growth parameters for the retained growth models are summarized. The observed mean scores for perceived promises about employer inducements at the three time points are visually represented in Figure 8.1. Comparing the intercept factor means in Table 8.6 with the observed means at T1 (Table 8.5) we see that there is a good correspondence between both. The *intercept factor mean* for career development and financial rewards corresponds with the mean of the three observed scores.

Table 8.6: Growth Parameters for Perceived Promises about Employer Inducements

| | Growth Model | Mean Intercept | Mean Shape | Variance Intercept | Variance Shape | Covariance I-S |
|---|---|---|---|---|---|---|
| Career Development | No Growth | 3.863* | - | .375* | - | - |
| Job Content | Optimal | 3.712* | .013* | .361* | .005* | -.639* |
| Social Atmosphere | Optimal | 3.391* | .017* | .565* | .005* | -.020* |
| Financial Rewards | No Growth | 3.161* | - | .305* | - | - |
| Work-Life Balance | Optimal | 3.257* | .021* | .465* | .004* | -.014* |

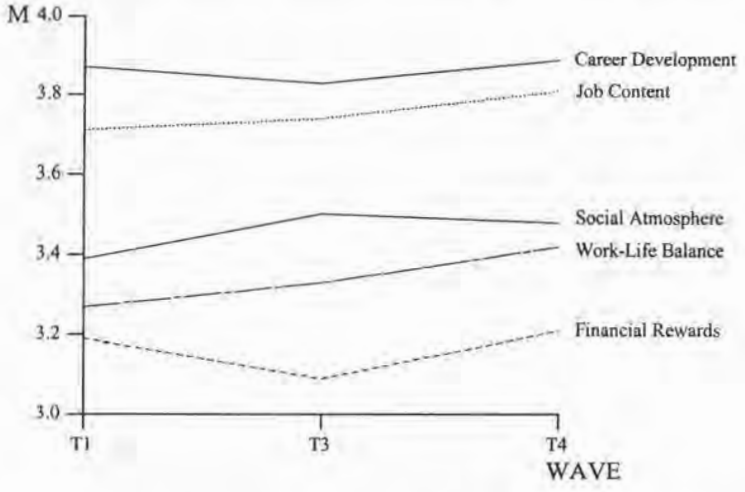
* $p < .05$

Table 8.6 shows that the *intercept factor variance* is significant for the five dimensions, indicating that systematic individual differences in perceived employer promises existed at initial status (T1).

Inspection of growth parameters shows that the *shape factor mean* is significant and positive for employer promises relating to job content, social atmosphere and work-life balance. This indicates that, over time, the extent to which newcomers believe the organization has made promises about these inducements increases. The *shape factor variance* is also significant for these inducements, indicating that newcomers differ in their rate of increase in the perception of employer promises.

The *factor covariance* between intercept and shape is negative and significant for job content and social atmosphere. This suggests that within the first year of employment, newcomers who started off (at initial status) with a higher perception of employer promises about these types of inducements, increase their perception of promises at a rate slower than that of those who started off with a lower perception.

Figure 8.1: Changes in Perceived Promises about Employer Inducements over Time




These results partially support hypothesis 1A, in which we stated that perceptions of employer promises increase during the first year of employment. During the first year, ***newcomers tend to increase their perceptions of promises about job content, social atmosphere and work-life balance*** although there are significant differences between individuals in the rate of change. ***Perceived promises about career development stay stable, while changes in perceived promises about financial rewards follow a curvilinear form***. Together these findings suggest that the changes in newcomers' perceived promises follow a different trajectory depending on the type of inducements.

It is also important to note that ***these changes in perceived promises do not follow a linear trajectory***. This suggests that the development of the psychological contract evolves through different stages in which changes take place at a different rate or in a different direction. While the increase in the perception of promises about job content and work-life balance accelerates during the second half year (from T3 to T4), the increase of perceived promises about social atmosphere during the first half year decelerates during the second half year.

### *8.2.2.2. Changes in Perceived Promises about Employee Contributions*

Table 8.7 contains the model fit results for three alternative growth models that were fitted for each dimension of employee contributions. Based on the model fit indices and $\chi^2_{difference}$ tests we retained the *optimal growth model* for promises about *in & extra role behavior, flexibility and loyalty*. For promises relating to *ethical behavior* the *linear growth model* was retained and for *employability* we retained the *no-growth model*.

The growth parameters for the retained models are summarized in Table 8.8. In Figure 8.2 we represent the changes in observed means over time. Comparing the *intercept factor means* in Table 8.8 with the observed means at T1 (Table 8.5) there is again a good correspondence between both, which supports the retained growth models. Table 8.12 also shows that the *intercept factor variance* is significant for the five dimensions, indicating that systematic individual differences in perceived employee promises existed at initial status (T1).

Table 8.7: Model Fit Indices for Latent Growth Models of Perceived Promises about Employee Contributions

| | $\chi^2$ | df | $\chi^2$/df | $\Delta\chi^2$ | $\Delta$df | TLI | CFI | RMSEA |
|---|---|---|---|---|---|---|---|---|
| **In- & Extra-Role Behavior** | | | | | | | | |
| ***M1: Optimal Growth*** | 2.031 | 2 | 1.015 | | | 1.000 | 1.000 | .007 |
| M2: Linear Growth | 7.651 | 3 | 2.550 | 5.620* | 1 | .997 | .999 | .068 |
| M3: No Growth | 35.696* | 6 | 5.949 | 33.665* | 4 | .992 | .992 | .122 |
| **Flexibility** | | | | | | | | |
| ***M1: Optimal Growth*** | 1.053 | 2 | 0.527 | | | 1.001 | 1.000 | .000 |
| M2: Linear Growth | 11.449* | 3 | 3.816 | 10.395* | 1 | .994 | .997 | .092 |
| M3: No Growth | 34.399* | 6 | 5.388 | 33.346* | 4 | .990 | .990 | .119 |
| **Loyalty** | | | | | | | | |
| ***M1: Optimal Growth*** | 0.346 | 2 | .173 | | | 1.002 | 1.000 | .000 |
| M2: Linear Growth | 18.552* | 3 | 6.184 | 12.208* | 1 | .985 | .992 | .125 |
| M3: No Growth | 37.542* | 6 | 6.257 | 37.196* | 4 | .984 | .984 | .126 |
| **Ethical Behavior** | | | | | | | | |
| M1: Optimal Growth | 5.457 | 2 | 2.729 | | | .997 | .999 | .072 |
| ***M2: Linear Growth*** | 5.567 | 3 | 1.856 | 0.110 | 1 | .999 | .999 | .051 |
| M3: No Growth | 27.587* | 6 | 4.598 | 22.130* | 4 | ;994 | .994 | .104 |
| **Employability** | | | | | | | | |
| M1: Optimal Growth | 2.527 | 2 | 1.264 | | | .999 | 1.000 | .028 |
| M2: Linear Growth | 7.393 | 3 | 2.464 | 4.866* | 1 | .996 | .998 | .066 |
| ***M3: No Growth*** | 11.341 | 6 | 1.890 | 8.814 | 4 | .998 | .998 | .052 |

* $p < .05$

Inspection of growth parameters shows that the *shape factor mean* is significant and positive for employee promises about role behavior, flexibility, loyalty and ethical behavior. This indicates that, over time, newcomers' perceptions of these promises increase. However, the results for loyalty have to be interpreted with caution since inspection of differences in mean scores over time indicates that there is a relatively strong increase in perceived promises about loyalty from T1 to T3 but that this is followed by a decrease from T3 to T4. The shape factor mean is positive since the mean score at T4 is still higher than the mean score at T1. Again, as with financial rewards, this suggests a curvilinear relationship but this cannot be tested with only three measurement occasions.

Table 8.8: Growth Parameters for Perceived Promises about Employee Contributions

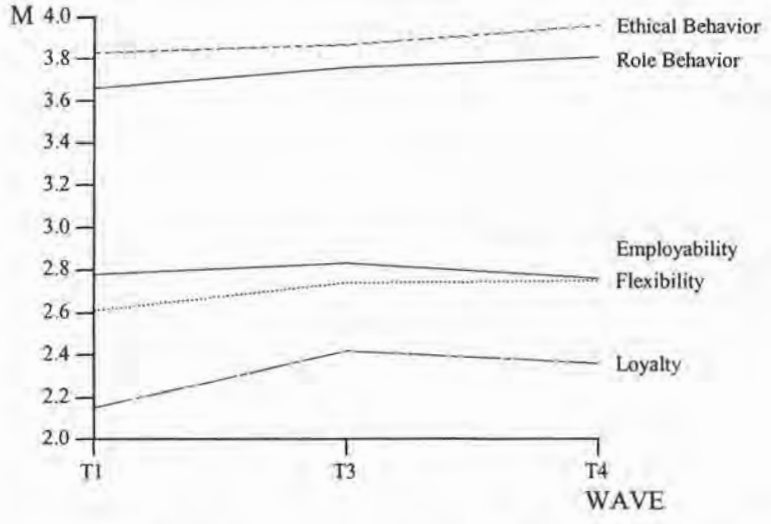
| | Growth Model | Mean Intercept | Mean Shape | Variance Intercept | Variance Shape | Covariance I-S |
|---|---|---|---|---|---|---|
| In- & Extra-Role Behavior | Optimal | 3.660* | .022* | .457* | .003* | -.021* |
| Flexibility | Optimal | 2.609* | .024* | .493* | .004* | -.015* |
| Loyalty | Optimal | 2.146* | .055* | .597* | .002 | .022 |
| Ethical Behavior | Linear | 3.820* | .013* | .545* | .000 | -.010* |
| Employability | No growth | 2.785* | - | .693* | - | - |

* $p < .05$

The *shape factor variance* is significant for role behavior and flexibility. This means that newcomers differ in the rate of increase in their perception of these promises. For loyalty and ethical behavior there is no indication for the existence of interindividual differences.

The *covariance between the intercept and shape factor* is negative and significant for the dimensions role behavior, flexibility and ethical behavior. This suggests that within the first year of employment, newcomers who started off (at initial status) with a higher perception of employee promises about these types of contributions, increase their perception at a rate slower than that of those who started off with a lower perception.

Figure 8.2: Changes in Perceived Employee Promises over Time




These results largely support hypothesis 2B which stated that ***newcomers increase their perceptions of employee promises during the first year of employment.*** This change trajectory holds for four of the five types of contributions measured, while perceptions of promises about employability do not change to a significant extent. As for employer inducements, however, it is important to note that *the perceptions of employee promises about role behavior, flexibility and loyalty do not follow a linear change trajectory.* Again this supports the idea that the development of the psychological contract does not take place in a continuous way over the first year of employment and that different processes could take place during the different socialization stages.

### 8.2.3. Changes in Actual Experiences

Second, we have fitted growth models for changes in newcomers' actual experiences with respect to the inducements they receive from their employer and the contributions they make to the organization. In the following subsections we successively describe these results for employer inducements (8.3.2.1) and for employee contributions (8.3.2.2).

#### *8.2.3.1. Employer Inducements Received*

In Table 8.9 the model fit indices are given for each dimension of employer inducements. Based on these fit indices the *no-growth model* was only retained for changes in experiences relating to *job content* since this restricted model did not result in a significant decrease in model fit compared to the optimal growth model. For the other inducements, the results indicate that during the socialization period there are significant changes in newcomers' perceptions of the inducements they receive from the organization. We retained the *optimal growth model* for three inducement dimensions, namely *career development, financial rewards* and *work-life balance.* For *social atmosphere* the *linear growth model* was retained.

Table 8.10 contains the growth parameters for the retained growth models. The evolution in mean scores representing newcomers' perceptions of the inducements they actually receive from their organization is graphically represented in Figure 8.3.

Table 8.9: Model Fit Indices for Latent Growth Models of Actual Experiences: Employer Inducements

| | $\chi^2$ | df | $\chi^2$/df | $\Delta\chi^2$ | $\Delta$df | TLI | CFI | RMSEA |
|---|---|---|---|---|---|---|---|---|
| **CAREER DEVELOPMENT** | | | | | | | | |
| ***M1: Optimal Growth*** | 1.140 | 2 | 0.570 | | | 1.001 | 1.000 | .000 |
| M2: Linear Growth | 33.319* | 3 | 11.106 | 32.180* | 1 | .979 | .989 | .174 |
| M3: No Growth | 80.467* | 6 | 13.411 | 79.328* | 4 | .974 | .974 | .193 |
| **JOB CONTENT** | | | | | | | | |
| M1: Optimal Growth | 4.973 | 2 | 2.487 | | | .998 | .999 | .041 |
| M2: Linear Growth | 9.741* | 3 | 3.247 | 4.767* | 1 | .996 | .998 | .061 |
| ***M3: No Growth*** | 14.242* | 6 | 2.374 | 9.269 | 4 | .998 | .998 | .064 |
| **SOCIAL ATMOSPHERE** | | | | | | | | |
| M1: Optimal Growth | 5.216 | 2 | 2.608 | | | .997 | .999 | .070 |
| ***M2: Linear Growth*** | 6.985 | 3 | 2.328 | 1.769 | 1 | .998 | .999 | .063 |
| M3: No Growth | 23.446 | 6 | 3.908 | 18.230* | 4 | .995 | .995 | .094 |
| **FINANCIAL REWARDS** | | | | | | | | |
| ***M1: Optimal Growth*** | 0.409 | 2 | 0.205 | | | 1.002 | 1.000 | .000 |
| M2: Linear Growth | 11.820* | 3 | 3.940 | 11.411* | 1 | .994 | .997 | .094 |
| M3: No Growth | 13.799 | 6 | 2.300 | 13.389* | 4 | .997 | .997 | .064 |
| **WORK-LIFE BALANCE** | | | | | | | | |
| ***M1: Optimal Growth*** | 2.319 | 2 | 1.165 | | | 1.000 | 1.000 | .022 |
| M2: Linear Growth | 17.488* | 3 | 5.829 | 15.158* | 1 | .992 | .996 | .121 |
| M3: No Growth | 21.284* | 6 | 3.547 | 18.955* | 4 | .994 | .996 | .088 |

* $p < .05$

Table 8.10: Growth Parameters for Actual Experiences: Employer Inducements

| | Growth Model | Mean Intercept | Mean Shape | Variance Intercept | Variance Shape | Covariance I-S |
|---|---|---|---|---|---|---|
| Career Development | Optimal | 3.551* | -.125* | .164* | .005 | .028 |
| Job Content | No growth | 3.760* | - | .276* | - | - |
| Social Atmosphere | Linear | 3.994* | -.015* | .309* | .000 | .000 |
| Financial Rewards | Optimal | 2.863* | -.041* | .322* | .011 | .005 |
| Work-Life Balance | Optimal | 3.790* | -.036* | .305* | .003 | .021* |

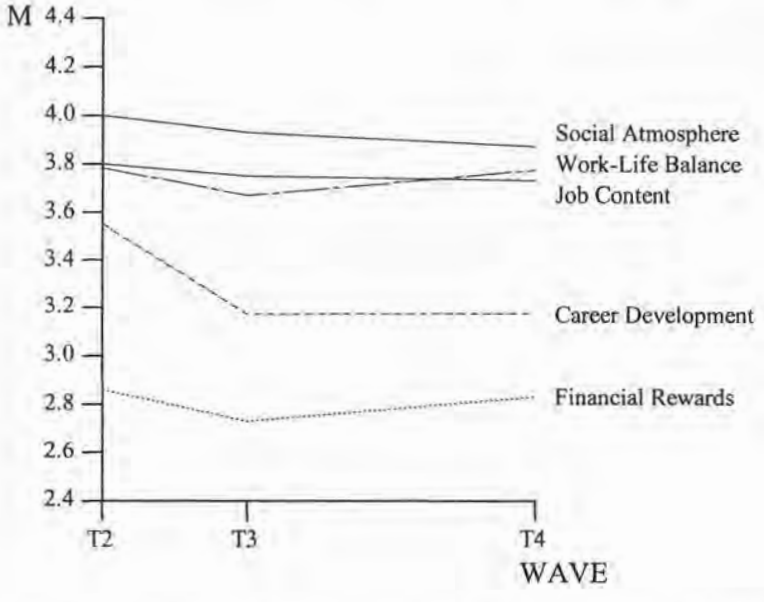
* $p < .05$

As shown in Table 8.10, with the exception of job content, the *intercept factor mean* corresponds closely with the observed mean scores for inducements received at T2. The mean intercept factor for job content corresponds with the mean of the observed scores at the three time points. *The variance of the intercept factor* is significant for all five inducements, suggesting that there are significant interindividual differences in newcomers' initial perceptions of the inducements they actually receive from their organization.

For inducements relating to career development, social atmosphere, financial rewards and work-life balance the *shape factor mean* is significant and negative, indicating that over time newcomers tend to decrease their perceptions of the inducements they receive from their employer. This decrease is linear for inducements relating to social atmosphere. For career development there is an initial decrease in perceptions from T2 to T3 but the perception at six months (T3) does not change anymore during the second half year of employment (T4). For financial rewards and work-life balance there is an initial decrease in actual experiences from T2 to T3 but newcomers increase their perceptions again from T3 to T4. Again these change patterns suggest that newcomers' changing perceptions of employer inducements do not follow a continuous curve over their first year of employment. For these inducements, the *shape factor variance* is not significant, suggesting that there are no significant interindividual differences with respect to the rate of change in newcomers' perceptions of the employer inducements they receive. Finally there is only a significant *covariance between the intercept and shape factor* with respect to work-life balance. This covariance is positive, which indicates that newcomers

starting off with a high perception of inducements about work-life balance decrease these perceptions at a rate faster than newcomers starting off with a low perception of these inducements.

Figure 8.3: Changes in Employer Inducements Received over Time




Together these findings support hypothesis 3A which stated that ***over time newcomers will tend to make up a more negative evaluation of the inducements they actually receive.***

#### *8.2.3.2. Employee Contributions Made*

Based on the model fit indices, to represent changes in employee contributions the *optimal growth model* was retained for *flexibility* and *ethical behavior* while the *linear growth model* was retained for *role behavior* and *loyalty*. For *employability* the *no-growth model* was retained (see Table 8.11). The parameters for the retained growth curves are summarized in Table 8.12. The changes in mean scores over time are graphically represented in Figure 8.4.

Comparing the *intercept factor means* with the observed means, there is a good correspondence between both. With respect to the *intercept factor variance* we see that there are significant differences between newcomers with respect to their initial perceptions of their contributions to the organization.

The *shape factor mean* is significant for only two types of employee contributions. For role behavior the shape is significant and positive (i.e. a linear increase in perceptions of actual role behavior), while for loyalty the shape is significant and negative (i.e. a linear decrease in perceptions of loyalty offered to the organization). For role behavior the significant *shape factor variance* also shows that newcomers differ with respect to the rate of increase in their perceptions of contributions made to the organization over time. For loyalty no interindividual differences exist. Although the shape factor mean is not significant for contributions relating to flexibility and ethical behavior, the significant shape factor variances suggest that newcomers differ with respect to the rate of change in their perceptions of these contributions. Finally only the *covariance between intercept and shape factor* of flexibility is significant and negative. The other covariances are not significant.

Table 8.11: Model Fit Indices for Latent Growth Models of Actual Experiences: Employer Inducements

| | $\chi^2$ | df | $\chi^2$/df | $\Delta\chi^2$ | Δdf | TLI | CFI | RMSEA |
|---|---|---|---|---|---|---|---|---|
| **In- & Extra-Role Behavior** | | | | | | | | |
| M1: Optimal Growth | 1.845 | 2 | 0.922 | | | 1.000 | 1.000 | .000 |
| ***M2; Linear Growth*** | 4.779 | 3 | 1.593 | 2.934 | 1 | .999 | 1.000 | .036 |
| M3: No Growth | 21.451* | 6 | 3.547 | 19.607* | 4 | .997 | .997 | .088 |
| **Flexibility** | | | | | | | | |
| ***M1: Optimal Growth*** | 7.054* | 2 | 3.527 | | | .995 | .998 | .087 |
| M2; Linear Growth | 14.989* | 3 | 4.996 | 7.935* | 1 | .992 | .996 | .110 |
| M3: No Growth | 34.225* | 6 | 5.704 | 27.171* | 4 | .991 | .991 | .119 |
| **Loyalty** | | | | | | | | |
| M1: Optimal Growth | 2.250 | 2 | 1.125 | | | 1.000 | 1.000 | .019 |
| ***M2; Linear Growth*** | 2.656 | 3 | 0.885 | 0.406 | 1 | 1.000 | 1.000 | .000 |
| M3: No Growth | 22.580* | 6 | 3.763 | 20.329* | 4 | .994 | .994 | .091 |
| **Ethical Behavior** | | | | | | | | |
| ***M1: Optimal Growth*** | 1.209 | 2 | 0.605 | | | 1.000 | 1.001 | .000 |
| M2; Linear Growth | 10.543 | 3 | 3.514 | 9.334* | 1 | .997 | .998 | .087 |
| M3: No Growth | 21.309* | 6 | 3.551 | 20.100* | 4 | .997 | .997 | .088 |
| **Employability** | | | | | | | | |
| M1: Optimal Growth | 4.886 | 2 | 2.443 | | | .996 | .999 | .066 |
| M2; Linear Growth | 5.286 | 3 | 1.762 | 0.400 | 1 | .998 | .999 | .048 |
| ***M3: No Growth*** | 11.110 | 6 | 1.852 | 6.224 | 4 | .998 | .998 | .051 |

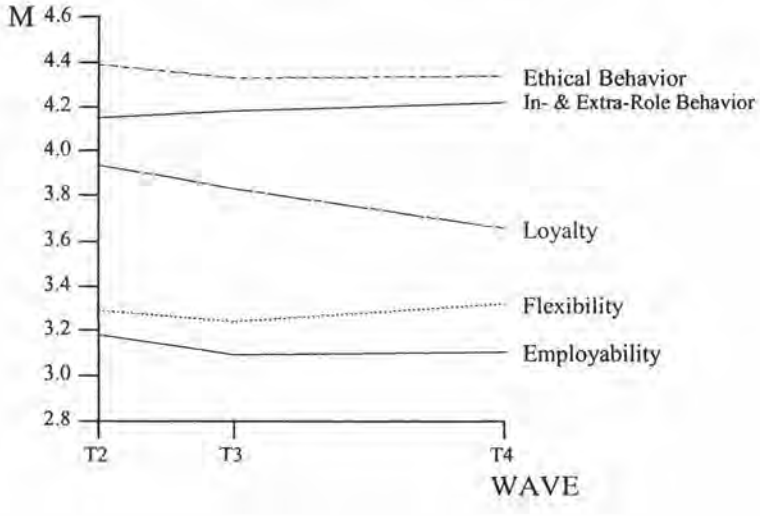
* $p < .05$

Table 8.12: Growth Parameters for Actual Experiences: Employee Contributions

| | Growth Model | Mean Intercept | Mean Shape | Variance Intercept | Variance Shape | Covariance I-S |
|---|---|---|---|---|---|---|
| In- & Extra-Role Behavior | Linear | 4.155* | .007* | .131* | .001* | -.001 |
| Flexibility | Optimal | 3.276* | .003 | .569* | .010* | -.020* |
| Loyalty | Linear | 3.923* | -.030* | .483* | .000 | .006 |
| Ethical behavior | Optimal | 4.388* | -.014 | .146* | .005* | -.005 |
| Employability | No growth | 3.112* | - | .840* | - | - |

* $p < .05$

Figure 8.4: Changes in Employee Contributions Made over Time



Together these findings provide mixed evidence for hypothesis 4A, in which we proposed that over time newcomers will increase their perceptions of the contributions the actually make to the organization. Apart from the observation that ***only for two types of contributions the changes during the first year of employment are significant,*** *there are* ***differences in the direction of these changes.*** Hypothesis 4A is only confirmed for *increases in role behavior*. For loyalty the changes go in the opposite direction (i.e. *decrease in loyalty*). For the other dimensions, no significant changes were observed. This differentiation in change trajectories supports our conceptualization of different dimensions of the psychological contract, which do not necessarily evolve in the same direction over time.

Again we see that the *change pattern from T2 to T3 compared to the change pattern from T3 to T4 is not linear for most dimensions*, confirming the existence of different stages in the socialization period that are characterized by different change patterns in newcomers' perceptions of their contributions to the organization.

### 8.2.4. Changes in the Evaluation of Promises

The third facet of the psychological contract are newcomers' evaluations of the extent to which promises are fulfilled by the organization and by themselves. Again, to analyze these changes the three alternative growth models were fitted for each of the psychological contract dimensions. We subsequently describe the results for employer inducements (section 8.2.4.1) and employee contributions (section 8.2.4.2).

#### *8.2.4.1. Perceived Fulfillment of Employer Promises*

Inspection of observed means at the three data collection moments in Table 8.3 reveals that both the direction and the magnitude of changes in the evaluation of promises differs depending on the type of inducements or contributions and that for most of them there is no linear change pattern. Based on the global model fit indices (Table 8.13) and the parameter estimates (Table 8.14), we retained the *linear growth model* for perceived fulfillment of promises about *career development* while the *optimal growth model* was retained for promises about *financial rewards and work-life balance*. For *job content* and *social atmosphere* a *no-growth model* best represented the data.

Table 8.13: Model Fit Indices for Latent Growth Models of Perceived Fulfillment of Promises

| | $\chi^2$ | df | $\chi^2$/df | $\Delta\chi^2$ | $\Delta$df | TLI | CFI | RMSEA |
|---|---|---|---|---|---|---|---|---|
| **CAREER DEVELOPMENT** | | | | | | | | |
| M1: Optimal Growth | 1.006 | 2 | 0.503 | | | 1.001 | 1.000 | .000 |
| ***M2; Linear Growth*** | 1.397 | 3 | 0.466 | 0.391 | 1 | 1.001 | 1.000 | .000 |
| M3: No Growth | 34.780* | 6 | 5.797 | 33.774* | 4 | .987 | .987 | .120 |
| **JOB CONTENT** | | | | | | | | |
| M1: Optimal Growth | 3.076 | 2 | 1.538 | | | .999 | 1.000 | .040 |
| M2; Linear Growth | 3.910 | 3 | 1.303 | 0.834 | 1 | .999 | .1000 | .030 |
| ***M3: No Growth*** | 7.477 | 6 | 1.246 | 4.401 | 4 | 1.000 | 1.000 | .027 |
| **SOCIAL ATMOSPHERE** | | | | | | | | |
| M1: Optimal Growth | 11.703* | 2 | 5.852 | | | .991 | .997 | .121 |
| M2; Linear Growth | 14.027* | 3 | 4.676 | 2.324 | 1 | .993 | .997 | .105 |
| ***M3: No Growth*** | 21.191* | 6 | 3.532 | 9.488 | 4 | .995 | .995 | .087 |
| **FINANCIAL REWARDS** | | | | | | | | |
| ***M1: Optimal Growth*** | 4.532 | 2 | 2.266 | | | .997 | .999 | .062 |
| M2; Linear Growth | 8.512* | 3 | 2.838 | 3.982* | 1 | .996 | .998 | .074 |
| M3: No Growth | 23.980* | 6 | 3.997 | 19.448* | 4 | .993 | .993 | .095 |
| **WORK-LIFE BALANCE** | | | | | | | | |
| ***M1: Optimal Growth*** | 3.109 | 2 | 1.555 | | | .999 | 1.000 | .041 |
| M2; Linear Growth | 3.638 | 3 | 1.213 | 0.529 | 1 | 1.000 | 1.000 | .025 |
| M3: No Growth | 18.616* | 6 | 3.103 | 15.507* | 4 | .996 | .996 | .080 |

* $p < .05$

The changes in mean scores for perceived fulfillment of employer promises at the three data collection waves are graphically represented in Figure 8.5. Comparison of mean scores at T2 in Table 8.3 with the *intercept factor means* in Table 8.15 indicates that there is close correspondence between both. The *intercept factor variance* is significant for all the inducements, suggesting that newcomers differ with respect to their initial evaluations of employer promise fulfillment.

Table 8.14: Growth Parameters for Perceived Fulfillment of Promises

| | Growth Model | Mean Intercept | Mean Shape | Variance Intercept | Variance Shape | Covariance I-S |
|---|---|---|---|---|---|---|
| Career Development | Linear | 3.057* | -.032* | .333* | .003* | -.010 |
| Job Content | No Growth | 3.264* | - | .328* | - | - |
| Social Atmosphere | No Growth | 3.515* | - | .380* | - | - |
| Financial Rewards | Optimal | 2.945* | -.041* | .396* | .009 | -.021 |
| Work-Life Balance | Optimal | 3.395* | .003 | .339* | .001 | .000 |

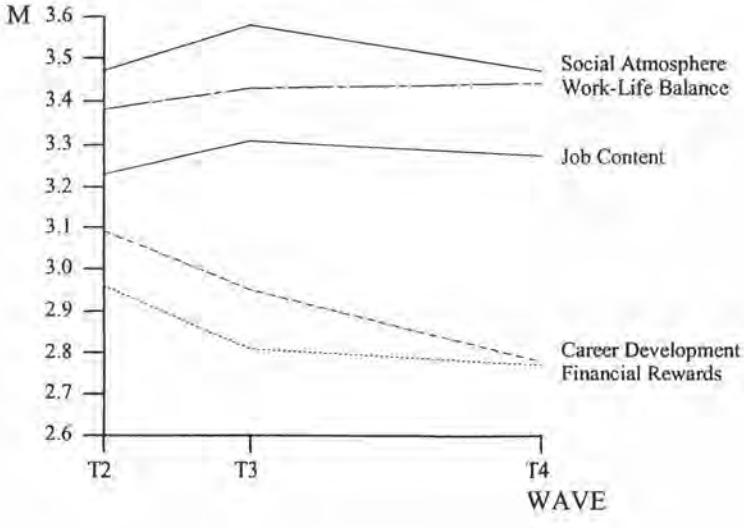
* $p < .05$

The *shape factor mean* is significant and negative for the evaluation of promises relating to career development and work-life balance, indicating that over time newcomers decrease their perceptions of promise fulfillment by their employer. The *variance of the shape factor* is only significant for perceived fulfillment of promises relating to career development. For the other types of inducements this means that there is no evidence for the existence of interindividual differences in the rate of change in newcomers' evaluations of employer contract fulfillment.

Inspection of the observed means shows that the decrease in the evaluation of promises about career development is linear, while the decrease for financial rewards is stronger from T2 to T3 than from T3 to T4 (Figure 8.5). For the evaluation of promises relating to the social atmosphere it is important to note that there is a decrease from T2 to T3 but that there is an increase at the same rate from T3 to T4, bringing the mean evaluation at T4 back to the level at initial status. This explains why the optimal model was preferred and also why there is a non-significant shape factor mean. For the other dimensions we can also observe that changes in the evaluation of promises over time do not occur in a continuos way.

These results provide only mixed evidence for hypothesis 3B in which we proposed that *over time newcomers will become more likely to make up a negative evaluation of the fulfillment of promises by their employer.* This hypothesis *is **only confirmed for promises about career development and financial rewards**.* Again there is a *difference in the direction and rate of change depending on the type of inducements being evaluated.*

Figure 8.5: Changes in Perceived Fulfillment of Employer Promises over Time



### *8.2.4.2. Perceived Fulfillment of Employee Promises*

For employee contributions, the *linear change model* was retained for changes in the evaluation of promise fulfillment relating to *role behavior, loyalty* and *employability*, while the *optimal change model* was retained for *flexibility* and the *no-growth model* for *ethical behavior* (see Table 8.15 for an overview of overall model fit indices). The parameters for these growth curves are summarized in Table 8.16. The changes in mean scores for perceived fulfillment of employee promises are graphically represented in Figure 8.6. Comparing the *intercept factor means* with the observed means, there is again a good correspondence between both. With respect to the *intercept factor variance* we see that there are significant differences between newcomers with respect to their initial evaluations of promise fulfillment for all types of employee contributions.

Table 8.15: Model Fit Indices for Latent Growth Models of Perceived Fulfillment of Promises

| | $\chi^2$ | Df | $\chi^2$/df | $\Delta\chi^2$ | $\Delta$df | TLI | CFI | RMSEA |
|---|---|---|---|---|---|---|---|---|
| **In- & Extra-Role Behavior** | | | | | | | | |
| M1: Optimal Growth | 0.981 | 2 | 0.490 | | | 1.001 | 1.000 | .000 |
| ***M2: Linear Growth*** | 1.241 | 3 | 0.414 | 0.260 | 1 | 1.001 | 1.000 | .000 |
| M3: No Growth | 12.087* | 6 | 2.015 | 11.107* | 4 | .999 | .999 | .055 |
| **Flexibility** | | | | | | | | |
| ***M1: Optimal Growth*** | 1.507 | 2 | 0.753 | | | 1.000 | 1.000 | .000 |
| M2: Linear Growth | 22.703* | 3 | 7.568 | 21.197* | 1 | .988 | .994 | .141 |
| M3: No Growth | 23.057* | 6 | 3.843 | 21.550* | 4 | .995 | .995 | .093 |
| **Loyalty** | | | | | | | | |
| M1: Optimal Growth | 2.183 | 2 | 1.092 | | | 1.000 | 1.000 | .017 |
| ***M2: Linear Growth*** | 4.437 | 3 | 1.479 | 2.254 | 1 | .999 | .999 | .038 |
| M3: No Growth | 13.168* | 6 | 2.195 | 19.985* | 4 | .997 | .997 | .086 |
| **Ethical Behavior** | | | | | | | | |
| M1: Optimal Growth | 0.263 | 2 | 0.131 | | | 1.001 | 1.000 | .000 |
| M2: Linear Growth | 6.400 | 3 | 2.133 | 6.137* | 1 | .998 | .999 | .058 |
| ***M3: No Growth*** | 20.795* | 6 | 3.466 | 20.532* | 4 | .997 | .997 | .086 |
| **Employability** | | | | | | | | |
| ***M1: Optimal Growth*** | 3.546 | 2 | 1.773 | | | .998 | .999 | .048 |
| M2: Linear Growth | 5.411 | 3 | 1.804 | 1.865 | 1 | .998 | .999 | .049 |
| M3: No Growth | 20.276* | 6 | 3.379 | 16.370* | 4 | .994 | .994 | .085 |

* $p < .05$

Table 8.16: Growth Parameters for Perceived Fulfillment of Promises

| | Growth Model | Mean Intercept | Mean Shape | Variance Intercept | Variance Shape | Covariance I-S |
|---|---|---|---|---|---|---|
| In- & Extra-Role Behavior | Linear | 3.731* | .008* | .112* | .000 | .000 |
| Flexibility | Optimal | 3.573* | -.005 | .338* | .026* | -.049* |
| Loyalty | Linear | 3.782* | -.016* | .215* | .001 | -.001 |
| Ethical behavior | No Growth | 3.883* | - | .101* | - | - |
| Employability | Linear | 3.295* | .012 | .548* | .004* | -.028* |

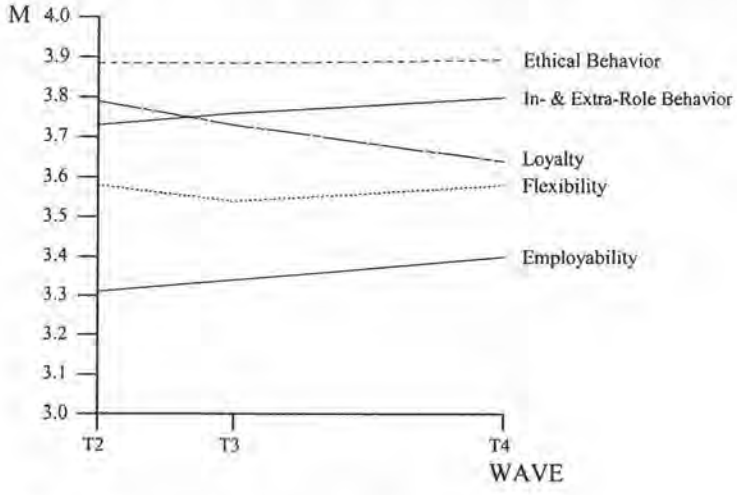
* $p < .05$

As shown in Table 8.16, the *shape factor mean* is significant for only two types of employee contributions. For *role behavior* the shape is significant and positive (i.e. a linear increase in evaluations of promises about role behavior), while for *loyalty* the shape factor mean is significant and negative (i.e. a linear decrease in evaluations of promises about loyalty). For both types of contributions, *the shape factor variance* is not significant. This suggests that there are no significant interindividual differences between newcomers with respect to the rate of change in their evaluations of these promises. Although the shape factor mean is not significant for evaluations of promises about flexibility and employability, the significant shape factor variances suggest that newcomers differ with respect to the rate of change in their evaluations of both types of promises. Together these findings

correspond with the change models for perceptions of actual contributions. They also suggest that the magnitude and the direction of change depend on the specific type of contributions being evaluated.
Finally only the *covariances* between the intercept and shape factor for flexibility and employability are significant and negative.

*The increases in the evaluation of promises about role behavior support hypothesis 4B. For loyalty the changes go in the opposite direction (i.e. a decrease in perceived fulfillment of promises about loyalty).* Again this supports our conceptualization of *different dimensions* of the psychological contract, which do not necessarily change in the same direction over time.

Figure 8.6: Changes in Perceived Fulfillment of Employee Promises over Time




### 8.2.5. Changes in Information Seeking

Finally we have modeled the changes in newcomers' contract-related information-seeking behaviors. In addition to the three nested models representing no growth, linear growth and optimal growth, a *quadratic growth model* was also fitted. As indicated before, fitting such a model requires at least four data collection moments, which was not the case in our study for the previous variables. A quadratic growth function is used to specify curvilinear trajectories and it is specified by adding a third latent factor. The factor loadings for this third factor are obtained by squaring the loadings for the linear factor (in this case, by fixing them to [0, 4, 25, 121] for T1, T2, T3, and T4, respectively (Chan, 1998). The linear trajectory is nested under the quadratic trajectory model because the former can be obtained by fixing four specific parameters in the latter to 0 (i.e. quadratic factor mean and variance, quadratic-intercept factor covariance, quadratic-shape factor variance) (Willett & Sayer, 1994). The null hypothesis that the addition of a quadratic term to the linear growth model does not improve the fit of the simpler linear representation can thus be evaluated by performing a $\chi^2_{difference}$ test. In the subsequent paragraphs we describe the growth models for information seeking about employer inducements (section 8.2.5.1) and employee contributions (section 8.2.5.2).

#### *8.2.5.1. Changes in Information Seeking about Employer Inducements*

In Table 8.17 the model fit indices for the alternative growth models are summarized. As can be seen from this table, the no-growth model always leads to a significant decrease in model fit compared to the optimal growth model. This suggests that there are changes in information-seeking behaviors for each of the five types of employer inducements. The $\chi^2_{difference}$ test also indicates that *the optimal growth model fits the data significantly better than the linear growth model.* The only exception are changes in information seeking about financial rewards. Based on the statistical information the linear model should be retained. However, when we look at the observed means at the four time points, a linear change model does not correspond well with the observed data.

Because the shape factor mean for financial rewards turned out to be non-significant for each of the fitted growth models, which indicates that no changes take place over time, we decided to *retain the no-growth model for financial inducements.*

Inspection of fit indices for Model 4 (quadratic growth model) suggests that the better-fitting optimal growth models for career development, job content, social atmosphere and work-life balance can be specified as curvilinear growth models. The $\chi^2_{difference}$ tests comparing linear and quadratic growth models for these dimensions show that the addition of a quadratic term to the linear growth model improves the fit of the latter to a significant extent. Comparison of the model fit indices of the optimal growth model and the quadratic growth model show that both have comparable fit. In order to retain the comparability with the growth models fitted for changes in the previous psychological contract measures (perceived promises, actual experiences and evaluation of promises) we decided to continue working with the optimal growth model. This is a simpler model in that it only has two instead of three latent factors. Moreover, we had formulated no specific hypotheses about the functional form of changes in information seeking over time so the additional information provided by the quadratic growth parameters is not necessary in view of our theoretical objectives.

Table 8.17: Model Fit Indices for Latent Growth Models of Information Seeking about Employer Inducements

| | $\chi^2$ | df | $\chi^2$/df | Model Comparison | $\Delta\chi^2$ | $\Delta$df | TLI | CFI | RMSEA |
|---|---|---|---|---|---|---|---|---|---|
| **CAREER DEVELOPMENT** | | | | | | | | | |
| M1: Optimal Growth | 10.767 | 6 | 1.794 | | | | .997 | .998 | .049 |
| M2: Linear Growth | 32.098* | 8 | 4.012 | 2 vs. 1 | 21.331* | 2 | .990 | .992 | .095 |
| M3: No Growth | 62.780* | 11 | 5.707 | 3 vs. 1 | 52.014* | 5 | .985 | .983 | .119 |
| M4: Quadratic Growth | 11.900 | 4 | 2.975 | 4 vs. 2 | 20.198* | 4 | .994 | .997 | .077 |
| **JOB CONTENT** | | | | | | | | | |
| M1: Optimal Growth | 11.406 | 6 | 1.901 | | | | .998 | .999 | .052 |
| M2: Linear Growth | 79.158* | 8 | 9.895 | 2 vs. 1 | 67.752* | 2 | .976 | .981 | .164 |
| M3: No Growth | 347.684* | 11 | 31.608 | 3 vs. 1 | 336.278* | 5 | .919 | .911 | .304 |
| M4: Quadratic Growth | 7.236 | 4 | 1.809 | 4 vs. 2 | 71.922* | 4 | .998 | .999 | .049 |
| **SOCIAL ATMOSPHERE** | | | | | | | | | |
| M1: Optimal Growth | 9.725 | 6 | 1.621 | | | | .998 | .999 | .043 |
| M2: Linear Growth | 34.890* | 8 | 4.361 | 2 vs. 1 | 25.165* | 2 | .990 | .992 | .101 |
| M3: No Growth | 142.357* | 11 | 12.942 | 3 vs. 1 | 132.632* | 5 | .963 | .960 | .190 |
| M4: Quadratic Growth | 10.906 | 4 | 2.726 | 4 vs. 2 | 23.984* | 4 | .995 | .998 | .072 |
| **FINANCIAL REWARDS** | | | | | | | | | |
| M1: Optimal Growth | 3.834 | 6 | 0.639 | | | | 1.001 | 1.000 | .000 |
| M2: Linear Growth | 6.164 | 8 | 0.770 | 2 vs. 1 | 2.330 | 2 | 1.001 | 1.000 | .000 |
| M3: No Growth | 21.963* | 11 | 1.997 | 3 vs. 1 | 18.128* | 5 | .997 | .996 | .055 |
| M4: Quadratic Growth | 5.262 | 4 | 1.316 | 4 vs. 2 | 0.902 | 4 | .999 | 1.000 | .031 |
| **WORK-LIFE BALANCE** | | | | | | | | | |
| M1: Optimal Growth | 5.395 | 6 | 0.899 | | | | 1.000 | 1.000 | .000 |
| M2: Linear Growth | 16.717* | 8 | 2.090 | 2 vs. 1 | 11.322* | 2 | .996 | .997 | .057 |
| M3: No Growth | 61.372* | 11 | 5.579 | 3 vs. 1 | 55.977* | 5 | .985 | .984 | .117 |
| M4: Quadratic Growth | 2.484 | 4 | 0.621 | 4 vs. 2 | 14.233* | 4 | 1.001 | 1.000 | .000 |

* $p < .05$

The growth parameters for the retained models are represented in Table 8.18 and the changes in observed mean scores for information seeking over time are graphically represented in Figure 8.7. The curves in Figure 8.7 also suggest that the changes in information seeking take place at a decelerating rate (i.e. a curvilinear form).

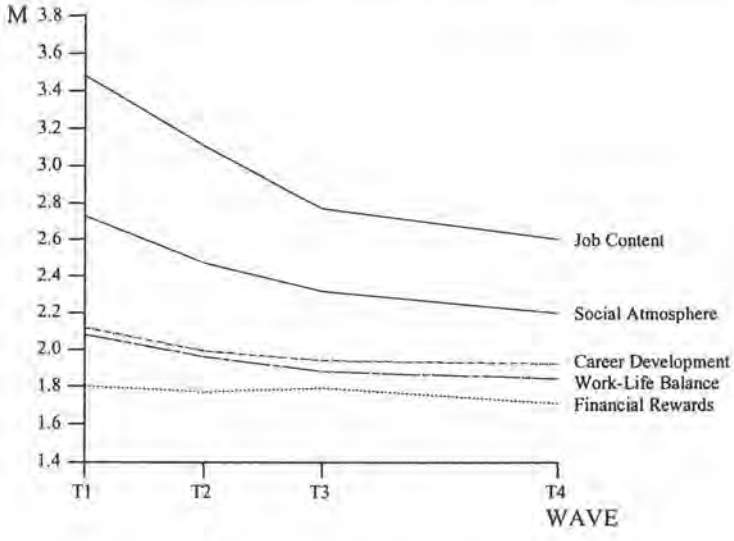
Table 8.18: Growth Parameters Information-Seeking Behaviors (Inquiry) about Employer Inducements

| | Growth Model | Mean Intercept | Mean Shape | Variance Intercept | Variance Shape | Covariance I-S |
|---|---|---|---|---|---|---|
| Career Development | Optimal | 2.126* | -.070* | .368* | .023* | -.051* |
| Job Content | Optimal | 3.476* | -.180* | .375* | .011* | -.024* |
| Social Atmosphere | Optimal | 2.734* | -.132* | .370* | .011* | -.132* |
| Financial Rewards | No Growth | 1.767* | - | .197* | - | - |
| Work-Life Balance | Optimal | 2.072* | -.051* | .265* | .010 | -.019 |

* $p < .05$

As can be seen from Table 8.18 the *intercept factor variance* is always significant, suggesting that newcomers differ with respect to the frequency of information seeking at initial status. The *shape factor mean* is significant and *negative* for information seeking about *career development, job content, social atmosphere and work-life balance.* This means that over time there is a decrease in the frequency with which newcomers search for information about these types of inducements. The *shape factor variances* are also significant, except for work-life balance, suggesting that interindividual differences exist with respect to the rate of decrease in newcomer information seeking over time. For *information seeking* about career development, job content and social atmosphere the covariances between the shape and intercept factors are significant and negative. This means that newcomers starting off at a higher frequency of information seeking decrease such information seeking at a rate faster than that of those who started off with a lower frequency.

Figure 8.7: Changes in Information Seeking about Employer Inducements over Time




In general these ***decreases in information seeking*** *confirm hypothesis 5A that over the course of the socialization period newcomers tend to decrease their search for information about the inducements they can expect of their employer* (with the exception of information seeking about financial rewards).

#### *8.2.5.2. Changes in Information Seeking about Employee Contributions*

Table 8.19 contains the model fit indices for the fitted growth models. As for information seeking about employer inducements, the no-growth model leads to a significant decrease in model fit compared to the optimal growth model for four of the five types of contributions, which indicates that there are changes in information-seeking behaviors for each of these contributions. The only exception is loyalty. Here the additional constraints imposed by the no-growth model do not lead to a significant decrease in model fit. Therefore, *for loyalty we retained the no-growth model* (which also corresponds best with the observed mean scores for the four time points). For *flexibility* the $\chi^2_{difference}$ test indicates that the *linear growth model* is a better representation than the

optimal growth model. Therefore we retained the linear growth model for information seeking about flexibility. For *role behavior, ethical behavior* and *employability* the *optimal growth model* better fit the data than the linear growth model. Inspection of fit indices of Model 4 (quadratic growth model) for these three dimensions suggests that changes can be specified as a curvilinear growth model. The $\chi^2_{difference}$ tests comparing linear and quadratic growth models for these dimensions show that the addition of a quadratic term to the linear growth model improves the fit of the latter to a significant extent. Comparing the model fit indices of the optimal growth model and the quadratic growth model show that both have comparable fit. This means that the rate of change in information seeking about role behavior, ethical behavior and employability differs over time. Based on the same arguments as those that were formulated for information seeking about employer inducements we decided to continue our analyses with the optimal growth model for these dimensions.

Table 8.19: Model Fit Indices for Latent Growth Models of Information Seeking about Employee Contributions

| | $\chi^2$ | df | $\chi^2$/df | Model Comparison | $\Delta\chi^2$ | $\Delta$df | TLI | CFI | RMSEA |
|---|---|---|---|---|---|---|---|---|---|
| **In- & Extra-Role Behavior** | | | | | | | | | |
| M1: Optimal Growth | 11.893 | 6 | 1.982 | | | | .997 | .998 | .054 |
| M2: Linear Growth | 33.408* | 8 | 4.176 | 2 vs. 1 | 21.515* | 2 | .991 | .993 | .098 |
| M3: No Growth | 154.009* | 11 | 14.001 | 3 vs. 1 | 142.116* | 5 | .965 | .961 | .198 |
| M4: Quadratic Growth | 12.451* | 4 | 3.113 | 4 vs. 2 | 20.957* | 4 | .994 | .998 | .080 |
| **Flexibility** | | | | | | | | | |
| M1: Optimal Growth | 4.014 | 6 | 0.669 | | | | 1.001 | 1.000 | .000 |
| M2: Linear Growth | 6.505 | 8 | 0.813 | 2 vs. 1 | 2.490 | 2 | 1.001 | 1.000 | .000 |
| M3: No Growth | 41.844* | 11 | 3.804 | 3 vs. 1 | 30.535* | 5 | .991 | .990 | .092 |
| M4: Quadratic Growth | 3.058 | 4 | 0.764 | 4 vs. 2 | 3.447 | 4 | 1.001 | 1.000 | .000 |
| **Loyalty** | | | | | | | | | |
| M1: Optimal Growth | 9.220 | 6 | 1.537 | | | | .998 | .999 | .040 |
| M2: Linear Growth | 9.956 | 8 | 1.244 | 2 vs. 1 | 0.735 | 2 | .999 | .999 | .027 |
| M3: No Growth | 20.033* | 11 | 1.821 | 3 vs. 1 | 10.813 | 5 | .997 | .997 | .050 |
| M4: Quadratic Growth | 6.938 | 4 | 1.734 | 4 vs. 2 | 3.018 | 4 | .997 | .999 | .047 |
| **Ethical Behavior** | | | | | | | | | |
| M1: Optimal Growth | 11.518 | 6 | 1.920 | | | | .997 | .998 | .053 |
| M2: Linear Growth | 42.185* | 8 | 5.273 | 2 vs. 1 | 30.667* | 2 | .985 | .988 | .113 |
| M3: No Growth | 88.274* | 11 | 8.025 | 3 vs. 1 | 76.756* | 5 | .976 | .974 | .145 |
| M4: Quadratic Growth | 9.028 | 4 | 2.257 | 4 vs. 2 | 33.157* | 4 | .996 | .998 | .062 |
| **Employability** | | | | | | | | | |
| M1: Optimal Growth | 14.522* | 6 | 2.420 | | | | .996 | .997 | .065 |
| M2: Linear Growth | 42.211* | 8 | 5.276 | 2 vs. 1 | 27.688* | 2 | .987 | .990 | .113 |
| M3: No Growth | 184.796* | 11 | 16.800 | 3 vs. 1 | 170.274* | 5 | .952 | .948 | .218 |
| M4: Quadratic Growth | 14.553* | 4 | 3.638 | 4 vs. 2 | 27.658* | 4 | .992 | .997 | .089 |

* $p < .05$

Table 8.20 summarizes the growth parameters for the retained growth models. In Figure 8.8 the changes in mean scores for information seeking about employee contributions over the first year of employment are represented.

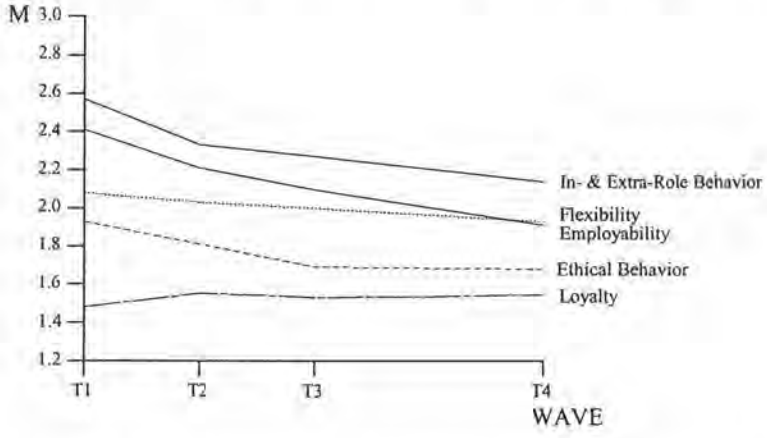
Table 8.20: Growth Parameters Information-Seeking Behaviors (Inquiry) about Employee Contributions

| | Growth Model | Mean Intercept | Mean Shape | Variance Intercept | Variance Shape | Covariance I-S |
|---|---|---|---|---|---|---|
| In- & Extra-Role Behavior | Optimal | 2.555* | -.097* | .358* | .011* | -.030* |
| Flexibility | Optimal | 2.070* | -.013* | .421* | .001* | -.015* |
| Loyalty | No Growth | 1.526* | - | .178* | - | - |
| Respect | Optimal | 1.925* | -.055* | .407* | .010* | -.038* |
| Employability | Optimal | 2.422* | -.119* | .437* | .018* | -.053* |

* $p < .05$

As shown in Table 8.20, the *intercept factor variance* is always significant, suggesting that newcomers differ with respect to the frequency of information seeking at initial status. The significant and negative *shape factor means* for role behavior, flexibility, ethical behavior and employability correspond with the decreasing curves in Figure 8.8. This means that over time there is a decrease in the frequency with which newcomers search for information about their contributions. The *shape factor variances* are also significant for these dimensions, suggesting that interindividual differences between newcomers exist with respect to the rate of decrease in information seeking over time. The *covariances between shape and intercept factors* are significant and negative. This means that newcomers starting off with a higher frequency of information seeking decrease such information seeking at a rate faster than that of those who started off with a lower frequency.

Figure 8.8: Changes in Information Seeking about Employee Contributions over Time




In general these decreases in information seeking about employee contributions *confirm hypothesis 5B, that* ***during the course of the socialization period newcomers tend to decrease their search for information about the contributions their employer expects of them.***

### 8.2.6. Summary of Findings

For most psychological contract dimensions the findings about changes in newcomers' psychological contracts and information seeking provide ***evidence for the dynamic nature of the psychological contract.*** We have summarized our findings in Table 8.21.

Table 8.21: Overview of Changes in Psychological Contract Variables during the Socialization Period

| | PERCEIVED PROMISES | ACTUAL EXPERIENCES | PROMISE FULFILLMENT | INFORMATION SEEKING |
|---|---|---|---|---|
| **EMPLOYER INDUCEMENTS** | | | | |
| Career Development | No change | Decrease | Decrease | Decrease |
| Job Content | Increase | No change | No change | Decrease |
| Social Atmosphere | Increase | Decrease | No change | Decrease |
| Financial Rewards | No change | Decrease | Decrease | No change |
| Work-Life Balance | Increase | Decrease | No change | Decrease |
| **EMPLOYEE CONTRIBUTIONS** | | | | |
| In- & Extra-Role Behavior | Increase | Increase | Increase | Decrease |
| Flexibility | Increase | No change | No change | Decrease |
| Loyalty | Increase | Decrease | Decrease | No change |
| Ethical Behavior | Increase | No change | No change | Decrease |
| Employability | No change | No change | No change | Decrease |

Over time newcomers tend to ***increase their perceptions of promises their employer has made to them***, *except with respect to career development and financial rewards.* They also ***increase their perceptions of promises they have made to their employer*** *about their own contributions.* Only perceived promises about employability do not change to a significant extent.

Changes in ***actual experiences*** with respect to ***organizational inducements*** and ***evaluation of employer promise fulfillment*** generally follow a decreasing function, suggesting that *over* ***time newcomers become more likely to make up a negative evaluation of the inducements they receive.*** However, this conclusion depends on the type of inducement considered: the evaluation of job content stays stable, both in terms of inducements received and in terms of the evaluation of promises. As can be seen from Table 8.21, newcomers appear to distinguish between the perception of inducements received and the evaluation of contract fulfillment. More specifically with respect to social atmosphere and work-life balance, there is a decrease in the perception of inducements received, while there are no significant decreases in the evaluation of promise fulfillment.

In contrast with the decreasing evaluations of employer inducements, ***changes in newcomers' perceptions of their own contributions and in their evaluations of the fulfillment of their own promises are less unequivocal.*** These remain stable with respect to three types of contributions (flexibility, ethical behavior and employability), while there is an increasingly positive evaluation of in & extra role behavior and a decreasingly negative evaluation of loyalty. These is correspondence between changes in contributions made and evaluation of promises for each of the five dimensions. This suggests that newcomers make less differentiation between both with respect to their own contributions.

Finally, *newcomers' contract-related information-seeking behaviors decrease over the first year of employment.* Both with respect to employer inducements and with respect to employee contributions, ***newcomers search less frequently for information about their psychological contract the longer they are working within the organization.*** Exceptions are information seeking about financial rewards and loyalty, for which no significant changes in information seeking are observed. These are also the two variables with the lowest initial scores for information seeking (cf. Table 8.4).

In general these results are in line with our hypotheses. However, two observations have to be taken into account when interpreting these findings. First, these general change patterns do not hold unequivocally for each type of employer inducements or employee contributions. Thus, ***differentiation in psychological contract processes depending on the type of inducements or contributions*** deserves further attention and it supports the conceptualization of the psychological contract as a multidimensional construct. Second, ***most change trajectories follow a curvilinear form***. This means that the changes in psychological contract variables do not take place at the same rate during both socialization stages (encounter and acquisition). This implies that psychological contract development during the first year of employment should be considered by taking into consideration these stages.

Finally, we note that the *significant intercept variances for perceived promises* indicate that *it was relevant to study the antecedents of newcomers' initial psychological contract perceptions*, since it supports the existence of interindividual differences among newcomers with respect to their initial perceptions of organizational and employee promises at organizational entry. The antecedents we discussed in Chapter 7 are one group of possible antecedents that are relevant in explaining these differences.

To conclude, these univariate analyses give more insight in the dynamics of psychological contract development and in changes in psychological contract variables taking place as a function of time. They provide evidence that the psychological contract is dynamic and that during the first year of employment newcomers change their perceptions and evaluations of promises as well as their information-seeking behaviors. In the subsequent paragraphs we will further explore these changes, by focusing on individual-level factors that could explain the

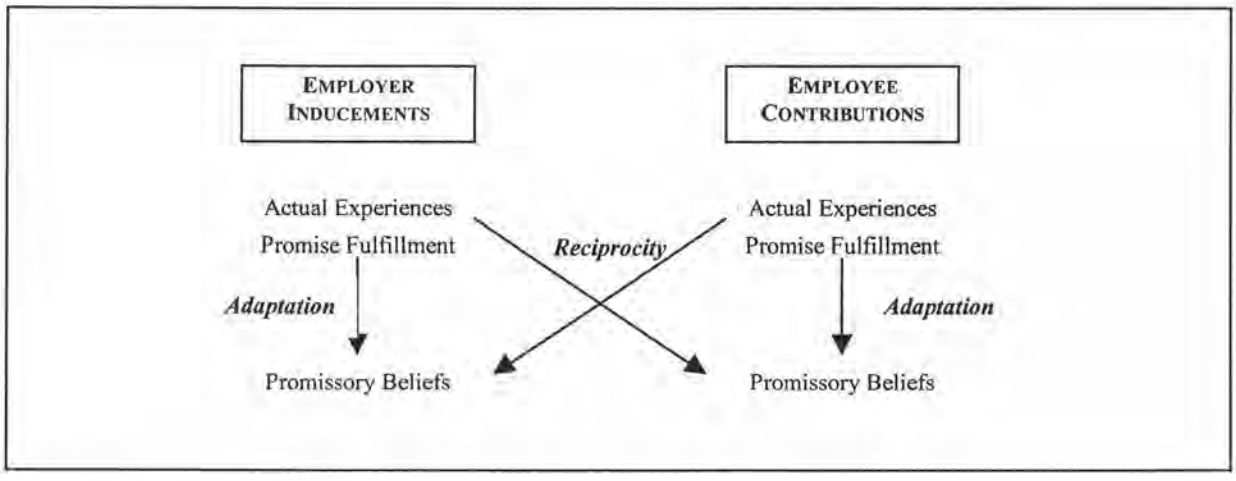
dynamics of psychological contract development. We successively investigate the relationship between psychological contract evaluations and changes in perceived promises (section 8.3) and the role of information seeking in psychological contract development (section 8.4).

## 8.3. Influence of Psychological Contract Evaluations on Changes in Promissory Beliefs

***What is the relationship between newcomers' psychological contract evaluations and changes in their promissory beliefs during the socialization process?***

The univariate latent growth models fitted in the previous section suggest that changes in the psychological contract take place during the first year of newcomers' employment in their new job. To obtain a better insight in the ***principles underlying these changes***, in this section we investigate the role of newcomers' psychological contract evaluations in explaining changes in their promissory beliefs during the socialization process[2]. In Figure 8.9 we visually represent the two principles investigated: (1) the *adaptation principle*, and (2) the *reciprocity principle*. First, we address the mechanism of ***adapting promissory beliefs to actual experiences and to the evaluation of promise fulfillment over time.*** The results of these analyses are presented in Section 8.3.2. Second, we analyze the relationship between newcomers' evaluations of employer psychological contract fulfillment on changes in their perceptions of employee promises, and vice versa the relationship between newcomers' evaluations of their own contract fulfillment and changes in their perceptions of employer promises. These analyses address the issue of ***reciprocity between the employer and employee side of the psychological contract over time.*** In section 8.3.3 we describe the results of these analyses. In the first section (8.3.1) we provide more information about our analytical choices.

Figure 8.9: Role of Adaptation and Reciprocity in Explaining Changes in Newcomers' Promissory Beliefs




### 8.3.1. Analytical Choices

The observation that *most psychological contract change trajectories are not linear* is important in determining our techniques for analyzing our data. The curvilinear change functions suggest a more "step-wise" development of the psychological contract during both socialization stages (encounter and acquisition), rather than linear

[2] Two papers addressing this research question are currently under review: De Vos, A., Buyens, D., & Schalk, R. (2002). Psychological contract development during organizational socialization: Adaptation to reality and the role of reciprocity. *Under review for publication in Journal of Organizational Behavior*; and De Vos, A. & Buyens, D. (2002). Veranderingen in het psychologisch contract tijdens de socialisatieperiode: Aanpassing aan de realiteit en de invloed van wederkerigheid. *Paper under review for publication in Gedrag & Organisatie.*

changes. In order to obtain a better insight in this change process we decided to focus our analyses on changes taking place within both stages separately and to analyze our data in a more explorative way using ***hierarchical regression analysis***. More specifically we conducted ***conditional change analyses*** (Curran, 2000; Curran & Bollen, 2001; Finkel, 1995). This analytical technique allows us to examine the factors affecting change in a dependent variable over time (Cohen & Cohen, 1983), while controlling for measures of the dependent variable at previous time periods.

Hierarchical regression analyses were conducted for both socialization stages separately. For the *encounter stage,* the T3 measure of perceived promises was used as the dependent variable and the T1 measure of perceived promises was entered in the equation first (after controlling for demographics), followed by the factor believed to be related to change in perceived promises over time (Cohen & Cohen, 1983; Finkel, 1995). For the *acquisition stage* the same procedures was followed, but this time the T4 measure of perceived promises was used as the dependent variable. After controlling for demographics, the T3 measure of perceived promises was entered in the equation, followed by the factor believed to be related to change in perceived promises. After controlling for the variance in the T3 (T4) scores in perceived promises due to T1 (T3), the relationship between the variable believed to be related to change and the adjusted T3 (T4) scores, which now reflect change from T1 (T3) are examined. A significant increase in $R^2$ indicates that the variable of interest is related to a change in the dependent variable (i.e. perceived promises) (Cohen & Cohen, 1983; Curran, 2000; Finkel, 1995).

To examine ***the principle of adapting perceived promises to psychological contract evaluations over time***, for each of the five dimensions of employer inducements and for each of the five dimensions of employee contributions we assessed the relationship between (a) the *evaluation of promise fulfillment,* and (b) the *perception of actual experiences* at T2 (T3) and the subsequent perception of promises at T3 (T4), controlling for perceived promises at T1 (T3).
To examine ***the principle of reciprocity between the employer and the employee side of the psychological contract over time,*** we regressed employees' perceived promises at T3 (T4) on (a) their *evaluations of promise fulfillment by the other party* and (b) their *perceptions of what is actually provided by the other party* at T1 (T3), controlling for perceived promises at T1 (T3).

In all regression analyses we controlled for demographic characteristics (age and gender). In view of the high correlation between age and prior job experience only age was included as a control variable. A dummy variable was used to represent gender (Male = 1).

### 8.3.2. Adapting Promissory Beliefs to Actual Experiences and Evaluations of Promises

First, we have assessed the "unilateral" impact of newcomers' perceptions of actual experiences and of their evaluations of promise fulfillment on changes in perceived promises. These analyses have been conducted for each dimension of employer inducements and employee contributions separately. In Section 8.3.2.1 we present the results for changes in perceived employer promises and in Section 8.3.2.2 the results for changes in perceived employee promises are described.

#### *8.3.2.1. Adapting Perceived Promises about Employer Inducements*

The analyses took place in two phases. First, we evaluated changes from T1 to T3 (i.e. occurring during the encounter stage). Second, we evaluated changes from T3 to T4 (i.e. occurring during the acquisition stage). We separately assessed the influence of the two ***independent variables***: the *evaluation of employer promise fulfillment* (model A), and the *perception of employer inducements received* (model B). The ***dependent variable*** was the *perception of promises at T3 (phase 1) or at T4 (phase 2).*

In Step 1 of the regression analyses, the control variables were entered. In Step 2 we entered the perception of organizational promises at T1 (phase 1) or T3 (phase 2). In Step 3a we entered newcomers' evaluations of the fulfillment of employer promises to assess model A. In Step 3b we entered newcomers perceptions of inducements received from the organization to assess model B. In view of the correlation between the evaluation of promise fulfillment and the perception of inducements received, we decided not to enter both variables simultaneously since this would partial out the significant effects of both. Including both variables separately allows us to assess the relative strength of both evaluative measures in explaining changes in perceived promises. The results of our regression analyses are represented in Table 8.22a (encounter stage) and Table 8.22b (acquisition stage).

Encounter Stage

At T3 there is a significant and positive impact of the ***evaluation of employer promise fulfillment*** on changes in perceived promises relating to *career development* ($\beta$ = .11, $p$ < .01), *job content* ($\beta$ = .12, $p$ < .01), *social atmosphere* ($\beta$ = .11, $p$ < .01) and *work-life balance* ($\beta$ = .16, $p$ < .01).

Table 8.22a: Hierarchical Regression Analyses for the Impact of Inducements Received and Evaluation of Promises on Changes in Perceived Promises during the Encounter Stage[1]

| T3 Perceived Promises: | Career Development | | | | Job Content | | | | Social Atmosphere | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3a | 3b | 1 | 2 | 3a | 3b | 1 | 2 | 3a | 3b |
| Age | -.29** | -.20** | -.20** | -.17** | .05 | -.00 | -.00 | -.01 | -.08 | .00 | .00 | -.00 |
| Gender | .06 | -.01 | -.01 | .02 | -.01 | -.06 | -.06 | -.05 | -.08 | -.07 | -.07 | -.06 |
| T1 Perceived promises | | .55** | .52** | .50** | | .56** | .52** | .45** | | .63** | .60** | .60** |
| T2 Fulfillment of promises | | | .11** | | | | .12** | | | | .11** | |
| T2 Inducements received | | | | .16** | | | | .22** | | | | .14** |
| $R^2$ | .08 | .38 | .39 | .40 | .00 | .31 | .33 | .33 | .01 | .41 | .42 | .43 |
| Adjusted $R^2$ | .08 | .37 | .38 | .40 | .00 | .31 | .32 | .32 | .01 | .40 | .41 | .42 |
| $R^2$ Change | | .29 | .01 | .02 | | .31 | .01 | .04 | | .39 | .01 | .02 |
| F | 14.37** | 62.36** | 48.68** | 70.36** | .54 | 62.70** | 49.84** | 51.52** | 2.66 | 92.61** | 72.79** | 78.01** |
| F Change | | 145.09** | 5.14* | 14.74** | | 186.53** | 8.03** | 24.01** | | 268.99** | 8.31** | 13.62** |

[1] Standardized $\beta$-coefficients are reported

* $p$ < .05; ** $p$ < .01

Table 8.22a (continued): Hierarchical Regression Analyses for the Impact of Inducements Received and Evaluation of Promises on Changes in Perceived Promises during the Encounter Stage[1]

| T3 Perceived Promises: | Financial Rewards | | | | Work-Life Balance | | | |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3a | 3b | 1 | 2 | 3a | 3b |
| Age | -.04 | -.02 | -.02 | -.04 | -.05 | -.03 | -.05 | -.04 |
| Gender | .02 | .00 | .00 | .03 | .01 | -.03 | -.04 | -.03 |
| T1 Perceived promises | | .57** | .55** | .51** | | .60** | .54** | .52** |
| T2 Fulfillment of promises | | | .07 | | | | .16** | |
| T2 Inducements received | | | | .20** | | | | .19** |
| $R^2$ | .00 | .32 | .33 | .39 | .00 | .36 | .38 | .40 |
| Adjusted $R^2$ | .00 | .32 | .32 | .38 | .00 | .35 | .37 | .39 |
| $R^2$ Change | | .32 | .01 | .03 | | .36 | .02 | .03 |
| F | .35 | 61.53** | 46.99** | 66.25** | .63 | 76.30** | 62.39** | 69.81** |
| F Change | | 183.55** | 2.62 | 22.64** | | 226.97** | 13.61** | 20.36** |

[1] Standardized $\beta$-coefficients are reported

* $p$ < .05; ** $p$ < .01

Hence, during the encounter stage newcomers change there perceptions of what their employer has promised them depending on their evaluations of promise fulfillment by their employer. Newcomers who make up a positive evaluation of promise fulfillment increase their perceptions of promises, while newcomers who make up a negative evaluation lower their perceptions of promises. For *financial rewards* the perceived fulfillment of promises has no significant impact on newcomers' subsequent perceptions of promises at T3 ($\beta = .07, p > .05$).

The effect of newcomers' ***perceptions of the inducements they receive from their organization*** has *a significant and positive effect on changes in perceived promises for each dimension of employer inducements.* Moreover this effect is always stronger than the effect of perceived promise fulfillment, ranging from $\beta = .14, p < .01$ for social atmosphere to $\beta = .22, p < .01$ for job content. This suggests that actual experiences are more predictive of changes in perceived promises than the more cognitive evaluations of promise fulfillment.

Acquisition Stage

As can be seen from Table 8.22b, the effects become smaller when we look at changes in perceived promises from T3 to T4. The ***evaluation of promise fulfillment*** at T3 only has a significant and positive effect on T4 perceptions of promises about *job content* ($\beta = .09, p < .05$) and *social atmosphere* ($\beta = .10, p < .05$). For the other types of inducements the impact of promise fulfillment on changes in perceived promises is not significant.

Table 8.22b: Hierarchical Regression Analyses for the Impact of Inducements Received and Evaluation of Promises on Changes on Perceived Promises during the Acquisition Stage[1]

| T4 Perceived Promises: | Career Development | | | | Job Content | | | | Social Atmosphere | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3a | 3b | 1 | 2 | 3a | 3b | 1 | 2 | 3a | 3b |
| Age | -.19** | -.04 | -.04 | -.03 | .09 | .05 | .05 | .04 | -.10 | -.02 | -.02 | -.02 |
| Gender | .01 | -.02 | -.02 | .02 | .05 | .07 | .07 | .07 | -.11 | -.04 | -.04 | -.03 |
| T3 Perceived promises | | .62** | .61** | .57** | | .62** | .58** | .56** | | .64** | .61** | .66 |
| T3 Fulfillment of promises | | | .01 | | | | .09* | | | | .10* | |
| T3 Inducements received | | | | .07 | | | | .10* | | | | .04 |
| $R^2$ | .04 | .39 | .39 | .37 | .01 | .39 | .40 | .40 | .02 | .42 | .43 | .47 |
| Adjusted $R^2$ | .03 | .39 | .38 | .36 | .01 | .39 | .39 | .40 | .02 | .41 | .42 | .46 |
| $R^2$ Change | | .36 | .00 | .01 | | .38 | .01 | .01 | | .40 | .01 | .00 |
| F | 5.54** | 61.82** | 46.21** | 51.59** | 1.95 | 74.70** | 57.49** | 59.09** | 3.73* | 81.63** | 63.19** | 77.24** |
| F Change | | 167.96** | .02 | 2.74 | | 217.80** | 3.94* | 4.18* | | 232.40** | 4.99* | 1.01 |

[1] Standardized $\beta$-coefficients are reported

* $p < .05$; ** $p < .01$

Table 8.22b (continued): Hierarchical Regression Analyses for the Impact of Inducements Received and Evaluation of Promises on Changes in Perceived Promises during the Acquisition Stage[1]

| T4 Perceived Promises: | Financial Rewards | | | | Work-Life Balance | | | |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3a | 3b | 1 | 2 | 3a | 3b |
| Age | .04 | .05 | .05 | .06 | -.02 | .02 | .02 | .00 |
| Gender | .04 | .04 | .04 | .04 | .00 | -.03 | -.03 | -.03 |
| T3 Perceived promises | | .60** | .60** | .57** | | .68** | .65** | .62** |
| T3 Fulfillment of promises | | | .00 | | | | .06 | |
| T3 Inducements received | | | | .10* | | | | .09* |
| $R^2$ | .00 | .36 | .36 | .39 | .00 | .46 | .46 | .48 |
| Adjusted $R^2$ | .00 | .35 | .35 | .39 | .00 | .46 | .46 | .47 |
| $R^2$ Change | | .36 | .00 | .01 | | .46 | .00 | .01 |
| F | .58 | 63.24** | 47.29** | 57.31** | .07 | 99.18** | 75.10** | 80.23** |
| F Change | | 187.93** | .00 | 4.74* | | 297.28** | 2.00 | 4.24* |

[1] Standardized $\beta$-coefficients are reported

* $p < .05$; ** $p < .01$

With respect to ***perceptions of employer inducements received***, these only have a significant effect on changes in perceived of promises for those inducements relating to *job content* ($\beta = .10, p < .05$), *work-life balance* ($\beta = .10, p < .05$), and *financial rewards* ($\beta = .09, p < .05$). The effects for career development and social atmosphere are not significant anymore.
In general, the comparison of $\beta$-coefficients shows that the effects of evaluations on changes in perceived promises are smaller for changes occurring during the acquisition stage than for changes occurring during the encounter stage.

Together our findings largely support hypothesis 6, which stated that ***over time changes in newcomers' perceptions of employer promises are affected by their evaluations of promise fulfillment and by their perceptions of the inducements received from their employer.*** At the same time they suggest two important things. First, although all relationships go in the same direction, their significance depends on the *type of inducements* and on the *evaluative measure used*. Second, also in line with the previous section, the *relationships are not the same for both socialization stages*. Apparently newcomers are more willing to bring their perceptions in line with the reality they encounter during the first six months at work, while they become less inclined to do this during the acquisition phase.

#### *8.3.2.2. Adapting Perceived Promises about Employee Contributions*

Second, we have assessed the impact of newcomers' perceptions of contributions made to the organization and of their evaluations of promise fulfillment on changes in their perceptions of promises made to the organization. These analyses have been conducted for each type of employee contributions separately. First, we have evaluated changes from T1 to T3 (i.e. occurring during the encounter stage). Second, we have evaluated changes from T3 to T4 (i.e. the acquisition stage).

In Step 1 of the regression analyses, the control variables were entered. In Step 2 we entered the perception of promises at T1 (phase 1) or T3 (phase 2). In Step 3a we entered newcomers' evaluations of the fulfillment of their promises; in Step 3b we entered perceptions of contributions actually made to the organization. The dependent variable was the perception of promises at T3 (encounter stage) and at T4 (acquisition stage). The results of these analyses are represented in Table 8.23a and Table 8.23b.

Encounter Stage
As shown in Table 8.23a, changes in newcomers' promissory beliefs about *in & extra role behavior* ($\beta = .11, p < .01$), *ethical behavior* ($\beta = .13, p < .01$), and *employability* ($\beta = .10, p < .05$) are significantly and positively affected by their ***evaluation of promise fulfillment***. For *flexibility* ($\beta = .03, p > .05$) and *loyalty* ($\beta = .07, p > .05$) the evaluation of promise fulfillment has no significant impact on changes in perceived promises.

If we look at the impact of newcomers' ***perceptions of the contributions they actually make*** to their organization on changes in perceived promises, there is a significant and positive influence for *each dimension of contributions* (ranging from $\beta = .17, p < .01$ for ethical behavior to $\beta = .29, p < .01$ for employability), with the *exception of contributions relating to loyalty* ($\beta = .06, p > .05$). These positive relationships indicate that newcomers who believe that they are providing their organization with contributions tend to increase their perceptions about what they have promised their employer. Or, inversely stated, newcomers who believe that they are not providing their organization with these contributions tend to decrease their perceptions of promises. The only exception is loyalty. As for employer inducements, overall we observe a stronger influence of actual experiences than of the more cognitive evaluation of promise fulfillment.

Table 8.23a: Hierarchical Regression Analyses for the Impact of Contributions Made and Evaluation of Promises in Changes on Perceived Promises during the Encounter Stage[1]

| T3 PERCEIVED PROMISES: | IN & EXTRA ROLE BEHAVIOR | | | | FLEXIBILITY | | | | LOYALTY | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3a | 3b | 1 | 2 | 3a | 3b | 1 | 2 | 3a | 3b |
| Age | -.05 | .02 | .02 | .01 | .07 | .04 | .04 | -.01 | -.01 | .03 | .02 | .00 |
| Gender | -.13 | -.06 | -.07 | -.05 | .06 | .03 | .03 | .03 | -.11 | -.03 | -.04 | -.00 |
| T1 Perceived promises | | .59** | .56** | .55** | | .63** | .62** | .55** | | .59** | .58** | .60** |
| T2 fulfillment of promises | | | .11** | . | | | .03 | . | | | .07 | |
| T2 Contributions | | | | 24** | | | | 24** | | | | .06 |
| $R^2$ | .02 | .36 | .37 | .43 | .01 | .40 | .40 | .46 | .01 | .35 | .35 | .37 |
| Adjusted $R^2$ | .02 | .35 | .37 | .42 | .00 | .39 | .39 | .46 | .01 | .34 | .35 | .37 |
| $R^2$ Change | | .34 | .01 | .06 | | .39 | .00 | .05 | | .34 | .00 | .00 |
| F | 4.29* | 78.33 | 61.82** | 78.47** | 1.86 | 87.21** | 65.43** | 91.34** | 1.75 | 53.59** | 40.79** | 61.92** |
| F Change | | 221.93** | 8.24** | 42.12** | | 255.53** | .45 | 39.38** | | 155.47** | 1.90 | 1.94 |

[1] Standardized $\beta$-coefficients are reported

* $p < .05$; ** $p < .01$

Table 8.23a (continued): Hierarchical Regression Analyses for the Impact of Contributions Made and Evaluation of Promises in Changes in Perceived Promises during the Encounter Stage[1]

| T3 PERCEIVED PROMISES: | ETHICAL BEHAVIOR | | | | EMPLOYABILITY | | | |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3a | 3b | 1 | 2 | 3a | 3b |
| Age | -.05 | .05 | .03 | .03 | -.03 | -.01 | -.01 | -.04 |
| Gender | -.09 | -.07 | -.07 | -.03 | -.03 | -.03 | -.03 | .04 |
| T1 Perceived promises | | .64** | .61** | .60** | | .54** | .51** | .45** |
| T2 fulfillment of promises | | | .13** | | | | .10* | |
| T2 Contributions | | | | .17** | | | | .29** |
| $R^2$ | .01 | .41 | .42 | .43 | .00 | .29 | .30 | .39 |
| Adjusted $R^2$ | .01 | .40 | .42 | .43 | -.01 | .29 | .29 | .39 |
| $R^2$ Change | | .40 | .02 | .03 | | .29 | .01 | .07 |
| F | 2.28 | 96.09** | 76.52** | 79.61** | .26 | 43.84** | 34.36** | 66.55** |
| F Change | | 280.64** | 10.94** | 19.02** | | 130.78** | 4.48* | 45.71** |

[1] Standardized $\beta$-coefficients are reported

* $p < .05$; ** $p < .01$

Acquisition Stage

Looking at the impact of T3 evaluations on changes in perceived promises during the acquisition stage, we observe a significant impact of the ***evaluation of promises*** relating to *in & extra role behavior* ($\beta = .10, p < .05$), *flexibility* ($\beta = .10, p < .05$), *ethical behavior* ($\beta = .13, p < .01$) and *employability* ($\beta = .10, p < .05$). This means that after one year, newcomers still change their perceptions of promises about these types of contributions as a function of their evaluation of these promises. Only changes in promissory beliefs about loyalty remain unaffected by newcomers' intermediate evaluations of promise fulfillment ($\beta = .06, p > .05$).

With respect to ***perceptions of contributions made*** *to the organization*, there is a significant and positive impact of *each of the five types of employee contributions*. These effects range from $\beta = .10, p < .05$ for *loyalty* to $\beta = .23, p < .01$ for *employability*. Newcomers who believe that they have made contributions to the organization, subsequently increase their promissory beliefs about their contributions at T4. If we compare this with the findings for organizational inducements, this finding suggests that newcomers give themselves a longer time period to bring their perceptions in line with reality with respect to their own contributions than with respect to their employer's inducements. It also suggests that the lack of a significant impact from T3 to T4 for employer inducements is not due to the longer time period between these time points.

Table 8.23b: Hierarchical Regression Analyses for the Impact of Contributions Made and Evaluation of Promises on Changes in Perceived Promises during the Acquisition Stage[1]

| T4 PERCEIVED PROMISES: | IN & EXTRA ROLE BEHAVIOR | | | | FLEXIBILITY | | | | LOYALTY | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3a | 3b | 1 | 2 | 3a | 3b | 1 | 2 | 3a | 3b |
| Age | -.10 | -.08 | -.08 | -.09 | .01 | .00 | -.01 | -.03 | -.01 | .01 | -.00 | -.01 |
| Gender | -.09 | -.02 | -.02 | -.01 | .03 | -.02 | -.02 | -.04 | -.04 | .03 | .02 | -.02 |
| T3 Perceived promises | | .63** | .60** | .57** | | .69** | .67** | .62** | | .57** | .55** | .59** |
| T3 Fulfillment of promises | | | .10* | | | | .10* | | | | .06 | .10* |
| T3 Contributions made | | | | .15** | | | | .18** | | | | |
| $R^2$ | .02 | .41 | .42 | .43 | .00 | .47 | .48 | .52 | .00 | .33 | .33 | .41 |
| Adjusted $R^2$ | .01 | .40 | .41 | .42 | .00 | .47 | .48 | .52 | -.01 | .32 | .32 | .40 |
| $R^2$ Change | | .39 | .01 | .02 | | .47 | .01 | .02 | | .32 | .00 | .01 |
| F | 3.29* | 80.56** | 62.43** | 65.47** | .16 | 100.48** | 77.94** | 95.27** | .18 | 40.05** | 30.33** | 59.54** |
| F Change | | 230.82** | 5.16* | 10.16** | | 300.84** | 5.90* | 16.07** | | 119.62** | 1.10 | 5.28* |

[1] Standardized $\beta$-coefficients are reported

* $p < .05$; ** $p < .01$

Table 8.23b (continued): Hierarchical Regression Analyses for the Impact of Contributions Made and Evaluation of Promises on Changes in Perceived Promises during the Acquisition Stage[1]

| T4 PERCEIVED PROMISES: | ETHICAL BEHAVIOR | | | | EMPLOYABILITY | | | |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3a | 3b | 1 | 2 | 3a | 3b |
| Age | -.04 | -.00 | -.01 | -.04 | .06 | .09 | .08 | .05 |
| Gender | -.14** | -.10* | -.09 | -.07 | -.08 | -.05 | -.05 | -.03 |
| T3 Perceived promises | | .65** | .60** | .56** | | .60** | .56** | .48** |
| T3 Fulfillment of promises | | | .13** | | | | .10* | |
| T3 Contributions made | | | | .19** | | | | .23** |
| $R^2$ | .02 | .44 | .45 | .46 | .01 | .36 | .37 | .41 |
| Adjusted $R^2$ | .02 | .43 | .45 | .46 | .00 | .36 | .36 | .40 |
| $R^2$ Change | | .42 | .01 | .03 | | .35 | .01 | .04 |
| F | 4.08* | 90.23** | 71.46** | 17.47** | 1.33 | 52.74** | 40.90** | 58.59** |
| F Change | | 256.52** | 8.93** | 75.38** | | 154.10** | 3.80* | 20.42** |

[1] Standardized $\beta$-coefficients are reported

* $p < .05$; ** $p < .01$

Together these findings provide support for hypothesis 7, in which we proposed ***that during the first year of employment, employees adapt their promissory beliefs about their contributions as a function of their intermediate evaluations of these contributions.*** Again, however, in interpreting these findings one should take into account the different content dimensions of employee contributions since this balancing principle does not operate unequivocally for each dimension.

### 8.3.3. Reciprocity between Employer Inducements and Employee Contributions over Time

In this section we first present the results for the relationship between employees' evaluations of inducements received from their organization and changes in their perceptions of promises made to the organization (section 8.3.3.1). Second, we present our findings for the relationship between employees' perceptions and evaluations of what they contribute to the organization and their changes in their perceptions of employer promises (section 8.3.3.2). Together both types of relationships should provide us with more information on the principle of reciprocity between employer inducements and employee contributions in psychological contract development.

Again, all relationships have been analyzed using hierarchical regression analyses. In Step 1 the control variables (gender and age) were entered. In Step 2 we controlled for the measurement of the dependent variable at the previous time period. In Step 3 the focal independent variable was entered (Step 3a: evaluation of promise fulfillment; Step 3b: perception of inducements received or contributions made).

### *8.3.3.1. Impact of Employer Inducements on Changes in Perceived Promises about Employee Contributions*

In a first group of regression analyses we assessed the influence of employees' perceptions of organizational promise fulfillment (Step 3a) and of the inducements received from their employer (Step 3b) on changes in their promissory beliefs about employee contributions. Again this was done separately for both socialization stages. The results of these analyses are represented in Table 8.24a (encounter stage) and Table 8.24b (acquisition stage).

Encounter Stage

As can be seen from Table 8.24a, for *each dimension of employee contributions*, changes in newcomers' promissory beliefs about their contributions are significantly affected by their ***perceptions of employer inducements received*** as well as by their ***evaluations of employer promise fulfillment***.

Table 8.24a: Hierarchical Regression Analyses for the Impact of Inducements Received and Evaluation of Promises on Changes in Perceived Employee Promises during the Encounter Stage[1]

| T3 PERCEIVED PROMISES: | IN & EXTRA ROLE BEHAVIOR | | | | FLEXIBILITY | | | | LOYALTY | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3a | 3b | 1 | 2 | 3a | 3b | 1 | 2 | 3a | 3b |
| Age | -.06 | .01 | .01 | .02 | .04 | .02 | .02 | .03 | -.04 | -.00 | -.01 | .00 |
| Gender | -.12* | -.06 | -.07 | -.07 | .07 | .03 | .03 | .03 | -.04 | -.01 | -.02 | -.01 |
| T1 Perceived promises | | .59** | .56** | .56** | | .63** | .62** | .62** | | .62** | .60** | .59** |
| T2 Promises Fulfillment | | | .16** | | | | .09* | | | | .12** | |
| T2 Inducements | | | | .22** | | | | .11** | | | | .11** |
| $R^2$ | .02 | .36 | .38 | .42 | .01 | .41 | .42 | .43 | .00 | .38 | .39 | ..39 |
| Adjusted $R^2$ | .01 | .35 | .37 | .41 | .00 | .40 | .41 | .42 | .00 | .38 | .39 | ..39 |
| $R^2$ Change | | .34 | .02 | .05 | | .40 | .01 | .01 | | .38 | .01 | .01 |
| F | 4.04* | 77.52** | 64.14** | 75.27** | 1.41 | 96.39** | 74.38** | 78.45** | .67 | 85.36** | 67.43** | 66.31** |
| F Change | | 220.30** | 15.83** | 34.04** | | 284.45** | 5.36* | 9.13** | | 253.94** | 8.84** | 7.76** |

[1] Standardized $\beta$-coefficients are reported

* $p < .05$; ** $p < .01$

Table 8.24a (continued): Hierarchical Regression Analyses for the Impact of Inducements Received and Evaluation of Promises in Changes in Perceived Employee Promises during the Encounter Stage[1]

| T3 PERCEIVED PROMISES: | ETHICAL BEHAVIOR | | | | EMPLOYABILITY | | | |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3a | 3b | 1 | 2 | 3a | 3b |
| Age | -.06 | .04 | .04 | .05 | -.04 | -.02 | -.02 | -.01 |
| Gender | -.05 | -.04 | -.06 | -.05 | .03 | .03 | .02 | .03 |
| T1 Perceived promises | | .64** | .61** | .60** | | .57** | .56** | .56** |
| T2 Promises Fulfillment | | | .19** | | | | .10* | |
| T2 Inducements | | | | .20** | | | | .09** |
| $R^2$ | .00 | .40 | .44 | .44 | .00 | .32 | .33 | .35 |
| Adjusted $R^2$ | .00 | .40 | .44 | .44 | .00 | .32 | .33 | .34 |
| $R^2$ Change | | /40 | .04 | .04 | | .32 | .01 | .02 |
| F | 1.38 | 94.69** | 82.25** | 84.12** | .47 | 66.26** | 51.93** | 55.84** |
| F Change | | 279.47** | 27.18** | 29.77** | | 197.39** | 6.38* | 13.477** |

[1] Standardized $\beta$-coefficients are reported

* $p < .05$; ** $p < .01$

This means that during the first months after organizational entry, newcomers who make up a positive evaluation of the inducements offered by their employer subsequently increase their perceptions of what they owe their employer. Or, differently stated, that newcomers who make up a negative evaluation of these inducements subsequently decrease their perceptions of what they owe their employer. For the **evaluation of *promise fulfillment***, these effects range from $\beta = .09$, $p < .05$ for *flexibility* to $\beta = .19$, $p < .01$ for *in & extra role behavior*. For the ***perception of inducements received,*** the effects range from $\beta = .09$, $p < .05$ for *employability* to $\beta = .22$, $p < .01$ for *in & extra role behavior*. This time the strength of the effects is comparable for both evaluative measures. Changes in employees' promises about their in & extra role behavior and about ethical behavior are most strongly affected by their evaluations.

Acquisition Stage

The impact of employer inducements received and of the evaluation of employer promise fulfillment decreases if we look at changes in perceived employee promises during the second half year of employment (cf. Table 8.24b).

Table 8.24b: Hierarchical Regression Analyses for the Impact of Inducements Received and Evaluation of Promises on Changes in Perceived Employee Promises during the Acquisition Stage[1]

| T4 PERCEIVED PROMISES: | IN & EXTRA ROLE BEHAVIOR | | | | FLEXIBILITY | | | | LOYALTY | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3a | 3b | 1 | 2 | 3a | 3b | 1 | 2 | 3a | 3b |
| Age | -.09 | -.08 | -.08 | -.08 | .02 | .00 | .00 | .00 | -.00 | .00 | .01 | .01 |
| Gender | -.08 | -.02 | -.02 | -.02 | .03 | -.03 | -.03 | -.03 | -.04 | -.01 | -.02 | -.02 |
| T3 Perceived promises | | .63** | .63** | .59** | | .71** | .70** | .68** | | .64** | .62** | .61** |
| T3 Fulfillment of promises | | | .01 | | | | .04 | | | | .12** | |
| T3 Contributions made | | | | .11* | | | | .09* | | | | .10* |
| $R^2$ | .02 | .41 | .41 | .42 | .00 | .50 | .50 | .51 | .00 | .41 | .42 | |
| Adjusted $R^2$ | .01 | .41 | .40 | .41 | .00 | .50 | .50 | .50 | .00 | .40 | .41 | |
| $R^2$ Change | | .39 | .00 | .01 | | .50 | .00 | .01 | | .40 | .01 | .01 |
| F | 2.86 | 81.78** | 61.17** | 6.65* | | 351.53** | .97 | 90.31** | .36 | 80.37** | 63.39** | 62.31** |
| F Change | | 235.83** | .01 | 63.98** | .23 | 117.49** | 88.35** | 4.90* | | 239.92** | 7.81** | 5.24* |

[1] Standardized $\beta$-coefficients are reported

* $p < .05$; ** $p < .01$

Table 8.24b (continued): Hierarchical Regression Analyses for the Impact of Inducements Received and Evaluation of Promises on Changes in Perceived Employee Promises during the Acquisition Stage[1]

| T4 PERCEIVED PROMISES: | ETHICAL BEHAVIOR | | | | EMPLOYABILITY | | | |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3a | 3b | 1 | 2 | 3a | 3b |
| Age | -.06 | -.01 | -.02 | -.02 | .04 | .07 | .07 | .07 |
| Gender | -.11 | -.09 | -.09 | -.09 | -.01 | -.04 | -.04 | -.04 |
| T3 Perceived promises | | .65** | .65** | .64** | | .62** | .61** | .60** |
| T3 Fulfillment of promises | | | -.01 | | | | .03 | |
| T3 Contributions made | | | | .01 | | | | .04 |
| $R^2$ | .02 | .44 | .44 | .44 | .00 | .38 | .38 | .38 |
| Adjusted $R^2$ | .01 | .43 | .43 | .43 | .00 | .37 | .37 | .38 |
| $R^2$ Change | | .42 | .00 | .00 | | .38 | .00 | .00 |
| F | 3.21* | 90.46** | 67.67** | 67.68** | .24 | 71.39** | 53.58** | 53.73** |
| F Change | | 260.24** | .03 | .06 | | 213.38** | .47 | .86 |

[1] Standardized $\beta$-coefficients are reported

* $p < .05$; ** $p < .01$

This time the impact of ***perceived employer promise fulfillment*** only significantly and positively affects changes in employee promises about *loyalty* ($\beta = .12$, $p < .01$). Employees who believe that their organization fulfills its promises tend to increase their promises about loyalty to the organization. For ***perceptions of inducements received*** there is a significant impact on changes in perceived promises relating to *in & extra role behavior* ($\beta = .11$, $p < .05$), *flexibility* ($\beta = .09$, $p < .05$), and *loyalty* ($\beta = .10$, $p < .05$). The effects on changes in promises about employability and ethical behavior are not significant anymore.

These findings provide support for hypothesis 8, but they are more unequivocal for the encounter stage than for the acquisition stage. They indicate that ***newcomers not only adapt their promissory beliefs about their contributions as a function of their evaluations of their contributions, but also as a function of their evaluations of the inducements they receive from their organization***. This supports the reciprocity principle, although our findings suggest that this principle operates to a stronger extent during the first months at work than during a later stage of the socialization process.

### *8.3.3.2. Impact of Employee Contributions on Changes in Perceived Promises about Employer Inducements*

In the next group of regression analyses we have assessed the influence of employees' evaluations of their own promises (Step 3a) and of their perceptions of contributions made the organization (Step 3b) on changes in their promissory beliefs about employer inducements. The results of these analyses are represented in Table 8.25a and Table 8.25b.

Encounter Stage

As shown in this Table 8.25a, the results are not unequivocal for all types of inducements and in comparison with Table 8.24a, they are less strong. Looking at employees' ***evaluations of their promise fulfillment***, these only have a significant and positive impact on changes in perceived employer promises relating to *job content* ($\beta = .12$, $p < .01$). For ***perceptions of contributions made***, perceived employer promises about *job content* ($\beta = .18$, $p < .01$) and *career development* ($\beta = .08$, $p < .05$) are the only types of inducements that are significantly affected by employees' perceptions of the contributions they have made to their organization.

Table 8.25a: Hierarchical Regression Analyses for the Impact of Contributions Made and Evaluation of Promises on Perceived Organizational Promises during the Encounter Stage[1]

| T3 Perceived Promises: | Career Development | | | | Job Content | | | | Social Atmosphere | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3a | 3b | 1 | 2 | 3a | 3b | 1 | 2 | 3a | 3b |
| Age | -.25** | -.19** | -.19** | -.19** | .05 | -.01 | -.01 | -.02 | -.10* | -.02 | -.02 | -.02 |
| Gender | .07 | .02 | .02 | .03 | -.03 | -.06 | -.07 | -.05 | -.08 | -.06 | -.06 | -.05 |
| T1 Perceived promises | | .56** | .56** | .55** | | .53** | .52** | .51** | | .63** | .63** | .62** |
| T2 Fulfillment of promises | | | .05 | | | | .12** | | | | .05 | |
| T2 Contributions made | | | | .08* | | | | .18** | | | | .04 |
| $R^2$ | .07 | .38 | .38 | .39 | .00 | .28 | .30 | .32 | .02 | .41 | .41 | .41 |
| Adjusted $R^2$ | .06 | .37 | .37 | .38 | .00 | .28 | .29 | .32 | .01 | .40 | .40 | .40 |
| $R^2$ Change | | .31 | .00 | .01 | | .28 | .02 | .03 | | .39 | .00 | .00 |
| F | 15.43** | 85.03** | 64.31** | 66.20** | .55 | 54.58** | 43.93** | 50.23** | 3.43* | 96.67** | 72.97** | 72.65** |
| F Change | | 209.05** | 1.71 | 4.30* | | 162.20** | 8.93** | 20.36** | | 278.64** | 1.53 | .89 |

[1] Standardized $\beta$-coefficients are reported

* $p < .05$; ** $p < .01$

Table 8.25a (continued): Hierarchical Regression Analyses for the Impact of Contributions Made and Evaluation of Promises on Perceived Organizational Promises during the Acquisition Stage[1]

| T3 PERCEIVED PROMISES: | FINANCIAL REWARDS | | | | WORK-LIFE BALANCE | | | |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3a | 3b | 1 | 2 | 3a | 3b |
| Age | -.07 | -.03 | -.03 | -.02 | -.07 | -.03 | -.03 | -.03 |
| Gender | .04 | .02 | .02 | .02 | .02 | -.02 | -.02 | -.02 |
| T1 Perceived promises | | .59** | .59** | .59** | | .60** | .60** | .60** |
| T2 Fulfillment of promises | | | .01 | | | | .00 | |
| T2 Contributions made | | | | .07 | | | | .02 |
| $R^2$ | .01 | .35 | .35 | .35 | .01 | .37 | .37 | .37 |
| Adjusted $R^2$ | .00 | .34 | .34 | .35 | .00 | .36 | .36 | .36 |
| $R^2$ Change | | .34 | .00 | .00 | | .36 | .00 | .00 |
| F | 1.21 | 74.98** | 56.15** | 58.14** | 1.04 | 80.87** | 60.51** | 61.86** |
| F Change | | 221.26** | .13 | .00 | | 239.35** | .01 | .30 |

[1] Standardized $\beta$-coefficients are reported

* $p < .05$; ** $p < .01$

Acquisition Stage

The results for changes in newcomers' perceptions of employer promises during the acquisition stage are presented in Table 8.25b. As shown in this table, during the acquisition stage there are *no significant effects of the* ***evaluation of the promise fulfillment*** on changes in newcomers' promissory beliefs about employer inducements. With respect to the effects of ***perceived contributions made*** *to the organization*, there is a significant impact on changes in perceived promises relating to *job content* ($\beta = .13$, $p < .01$), and also on perceived promises relating to *financial rewards* ($\beta = .13$, $p < .01$) and *work-life balance* ($\beta = .09$, $p < .05$).

Together these findings provide only partial support for hypothesis 9, in which we stated that *employees would change their perceptions of what their employer owes them as a function of what they contribute to the organization.* Apparently, ***the effect of the norm of reciprocity is more straightforward with respect to employees' promissory beliefs about their own contributions than with respect to their promissory beliefs about employer inducements.***

Table 8.25b: Hierarchical Regression Analyses for the Impact of Contributions Made and Evaluation of Promises on Perceived Organizational Promises during the Encounter Stage[1]

| T4 PERCEIVED PROMISES: | CAREER DEVELOPMENT | | | | JOB CONTENT | | | | SOCIAL ATMOSPHERE | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3a | 3b | 1 | 2 | 3a | 3b | 1 | 2 | 3a | 3b |
| Age | -.18** | -.04 | -.05 | -.05 | .09 | .05 | .04 | .03 | -.07 | -.02 | -.03 | -.03 |
| Gender | .03 | .01 | .02 | .02 | .06 | .07 | .07 | .08 | -.06 | -.03 | -.03 | -.03 |
| T3 Perceived promises | | .59** | .59** | .58** | | .62** | .61** | .59** | | .68** | .67** | .67** |
| T3 Fulfillment of promises | | | .05 | | | | .08 | | | | .05 | |
| T3 Contributions made | | | | .07 | | | | .13** | | | | .06 |
| $R^2$ | .03 | .36 | .36 | .37 | .01 | .40 | .40 | .41 | .01 | .47 | .47 | .47 |
| Adjusted $R^2$ | .03 | .35 | .35 | .36 | .01 | .39 | .40 | .40 | .00 | .46 | .47 | .46 |
| $R^2$ Change | | .33 | .00 | .01 | | .38 | .01 | .02 | | .46 | .00 | .00 |
| F | 6.10** | 65.53** | 49.55** | 51.54** | 2.07 | 76.70** | 59.23** | 60.99** | | 301.53** | 78.23** | 2.06 |
| F Change | | 178.26** | 1.38 | 2.60 | | 223.34** | 3.40 | 8.77** | 1.74 | 102.65** | 1.66 | 77.73** |

[1] Standardized $\beta$-coefficients are reported

* $p < .05$; ** $p < .01$

Table 8.25b (continued): Hierarchical Regression Analyses for the Impact of Contributions Made and Evaluation of Promises on Perceived Organizational Promises during the Acquisition Stage[1]

| T4 Perceived Promises: | Financial Rewards | | | | Work-Life Balance | | | |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3a | 3b | 1 | 2 | 3a | 3b |
| Age | .05 | .06 | .06 | .04 | -.05 | .01 | .01 | -.01 |
| Gender | .06 | .05 | .05 | .05 | .02 | -.02 | -.02 | -.02 |
| T3 Perceived promises | | .62** | .61** | .59** | | .69** | .69** | .67** |
| T3 Fulfillment of promises | | | .04 | | | | .01 | |
| T3 Contributions made | | | | .13** | | | | .09* |
| $R^2$ | .01 | .39 | .39 | .40 | .00 | .47 | .47 | .48 |
| Adjusted $R^2$ | .00 | .38 | .38 | .40 | .00 | .47 | .47 | .47 |
| $R^2$ Change | | .38 | .00 | .02 | | .47 | .00 | .01 |
| F | 1.01 | 74.15** | 55.98** | 59.43** | .48 | 104.04** | 77.85** | 5.36* |
| F Change | | 219.20** | 1.28 | 9.94** | | 320.29** | .09 | 80.76** |

[1] Standardized $\beta$-coefficients are reported

* $p < .05$; ** $p < .01$

### 8.3.4. Summary of Findings

In this section we have described our analyses addressing two principles underlying the changes occurring in newcomers' promissory beliefs about employer inducements and employee contributions during the socialization process.

First, we have addressed the ***adaptation principle*** by assessing the ***extent to which newcomers adapt their promissory beliefs to their evaluations of contract-related experiences within the organization.*** Most of our results are in line with our proposition that during the first months at work, newcomers tend to adapt their perceptions of promises to the reality as they experience and evaluate it. Two findings are worth noting here. In the first place, we have found that this adaptation process is *more strongly affected by the perception of actual experiences (inducements received and contributions made) than by the evaluation of promise fulfillment.* In the second place, our results show that *this adaptation process does not operate to the same extent during the both socialization stages* we have discerned. For perceived promises about employer inducements, the adaptation of perceived promises mainly takes place during the encounter stage, and to a much smaller extent during the acquisition stage. This suggests that after six months, newcomers become less willing to adapt their initial promissory beliefs as a function of reality. For promissory beliefs about their own contributions this adaptation process continues during the second part of the socialization period, suggesting that newcomers stay more flexible in adapting their perceptions about their own contributions than about what they expect of their employer.

Second, we have addressed the ***reciprocity principle*** by examining the *extent to which newcomers change their promissory beliefs as a function of their evaluations of contract behavior (actual experiences and promise fulfillment) by the other party.* We found that the reciprocity principle is more predictive in explaining changes in promissory beliefs about *employee contributions* than about employer inducements. Our results show that newcomers change their perceptions of what they owe their organization as a function of their intermediate evaluations of the inducements they receive and of their evaluations of employer promise fulfillment. These effects are stronger during the encounter stage than during the acquisition stage. Inversely, the changes in employees' promissory beliefs about what their employer owes them are less unequivocally affected by their evaluations of their own contributions.

In section 8.5 we will further discuss these findings in view of our hypotheses.

## 8.4. THE ROLE OF INFORMATION SEEKING IN PSYCHOLOGICAL CONTRACT DEVELOPMENT

***What is the relationship between newcomers' information-seeking behaviors about the psychological contract and their psychological contract perceptions and evaluations over time?***

Within the socialization literature newcomer information seeking receives substantial attention as an antecedent of newcomer adaptation. The question guiding our research is whether information seeking also plays a role in newcomer psychological contract development. In our study, newcomer information seeking has been measured at four time points. In section 8.2.5 we have already discussed our findings about univariate changes in information seeking over time. From these analyses it became clear that newcomers have a tendency to decrease their information-seeking behaviors over the course of the socialization period, the only exceptions being information seeking about financial rewards and loyalty. The estimated growth parameters also indicate that, both with respect to initial status (intercept) and with respect to the rate of change in information seeking (shape), significant individual differences between newcomers exist. Therefore it is relevant to investigate to which extent these differences in information seeking are related to newcomers' psychological contract perceptions and evaluations. We hereby focus on the employer part of the psychological contract, i.e. employer inducements.

We start with a description of the analytical choices we have made to analyze this third research question (section 8.4.1). Subsequently we assess the relationship of information seeking with newcomers' perceptions of employer inducements received and of employer promise fulfillment after one year (i.e. hypothesis 10). In section 8.4.2 this is done for each of the five types of inducements separately, and in section 8.4.3 we assess the influence of information seeking on newcomers' global evaluations of their employment relationship. To further explore these findings, we further examine the relationship between information seeking and perceived promises over time (section 8.4.4). In section 8.4.5 we summarize our findings.

### 8.4.1. Analytical Choices

In order to analyze our third research question on psychological contract development we use ***conditional latent growth modeling (LGM)***. As we have explained in Chapter 6 (section 6.7.2), this implies the inclusion of one or more predictor or outcome variables to the fitted univariate growth curves. In view of our research question, we will include the T4 measures related to psychological contract evaluation as outcome variables in the model. For each dimension of inducements we depart from the growth curve of information seeking that best fitted the data (cf. section 8.2.5.1). Further technical details will be provided in the subsequent sections.

### 8.4.2. Influence of Information Seeking on Evaluations of Employer Inducements after One Year

First, we examined associations between information seeking and newcomers' perceptions of employer inducements received and evaluations of employer promise fulfillment. Conditional growth models were fitted, departing from the the univariate growth models for information seeking behavior about employer inducements (cf. section 8.2.5.1). We hereby focused on information seeking about the five dimensions of employer inducements. Following the procedure prescribed by Chan (1998) and Duncan *et al.* (1999), for each of these dimensions, the univariate growth model that best described the change trajectory in information seeking was respecified to include two outcome variables: (1) *perception of inducements at T4*, and (2) *evaluation of promise fulfillment at T4*.

For *career development*, *job content*, *social atmosphere* and *work-life balance* we departed from the *optimal growth model* (which can be described, as indicated by the quadratic growth models, as following a curvilinear

function). For *financial rewards*, we departed from the *no-growth model* since the changes in information seeking about financial rewards could not be captured adequately by the fitted growth models (cf. section 8.2.5.1).

Because there were no significant individual differences in rate of change for information seeking about work-life balance it was not meaningful to model associations between the shape factor and outcomes for this dimension (Chan & Schmitt, 2000). Thus, in the respecified univariate growth model for information seeking about work-life balance, the structural effects from the shape factor to both outcome variables were fixed at zero. Since the no-growth model was retained for information seeking about financial rewards, for this dimension we only assessed the relationship between the initial status factor (intercept) and both outcome variables; all parameters relating to the shape factor, i.e. also the structural effects on the outcome variables, were fixed at zero.

The error variances of the perception of inducements received and the perception of promise fulfillment were allowed to covary since both variables were measured at the same time point (Duncan *et al.*, 1999). All five respecified growth models continued to provide a good fit, as can be seen from Table 8.26.

Table 8.26: Model Fit Indices for Respecified Univariate Information Seeking Growth Models

| | $\chi^2$ | df | $\chi^2$/df | TLI | CFI | RMSEA |
|---|---|---|---|---|---|---|
| Career Development | 11.601 | 10 | 1.160 | .999 | 1.000 | .022 |
| Job Content | 14.792 | 10 | 1.479 | .998 | .999 | .038 |
| Social Atmosphere | 14.626 | 10 | 1.463 | .998 | .999 | .037 |
| Financial Rewards | 34.735** | 17 | 2.043 | .996 | .996 | .056 |
| Work-Life Balance | 10.105 | 12 | 0.842 | 1.001 | 1.001 | .000 |

** $p < .01$

Table 8.27 presents, for each type of employer inducements, the standardized structural parameter estimates of the direct effects from the growth factors to both outcome variables.

Table 8.27: Standardized Structural Parameter Estimates of Direct Effects from Growth Factors to Outcomes

| | Perception of Inducements Received | Evaluation of Promise Fulfillment |
|---|---|---|
| **CAREER DEVELOPMENT** | | |
| Intercept | .201** | .183* |
| Shape | .083 | -.075 |
| **JOB CONTENT** | | |
| Intercept | .143* | .179** |
| Shape | .029 | .073 |
| **SOCIAL ATMOSPHERE** | | |
| Intercept | .206** | .226** |
| Shape | -.103 | -.037 |
| **FINANCIAL REWARDS** | | |
| Intercept | .062 | -.052 |
| Shape | - | - |
| **WORK-LIFE BALANCE** | | |
| Intercept | .026 | .029 |
| Shape | - | - |

* $p < .05$; ** $p < .01$

As shown in Table 8.27, the structural effects from the *intercept factor* of *career development, job content* and *social atmosphere* on the perception of inducements and on the evaluation of promise fulfillment were significant, indicating that for these types of inducements, ***individuals who showed more initial information-***

***seeking behaviors were more positive about what they received from their organization after one year.*** For financial rewards and work-life balance the intercept factors had no significant impact. The effects of the *shape factors* (if not fixed at zero) were non-significant for all types of inducements.

### 8.4.3. Impact of Information Seeking on General Evaluations and Satisfaction after One Year

Second, we assessed the impact of information seeking about each of the five types of employer inducements on newcomers' global evaluations of their psychological contract and on their satisfaction with their employment relationship after one year. This time the fitted univariate growth models were respecified to include the following outcome variables, which were all measured at T4: (1) *general perception of inducements received,* (2) *general evaluation of promise fulfillment,* (3) *satisfaction,* and (4) *met expectations.* The measurements of general perception of inducements and general evaluation of promise fulfillment are composite variables in which the scores on all items for the five dimensions were aggregated into one scale. Based on the results of our confirmatory factor analyses (Chapter 6, section 6.4.5.1) it was feasible to do this since the addition of one higher order factor did not result in a significant decrease in model fit.

As for the previous analyses we departed from the optimal growth model for information seeking about career development, job content, social atmosphere and work-life balance but for the latter dimension the shape factor loadings on the outcome variables were fixed at zero. For financial rewards we departed from the no-growth model. Again, the respecified growth models continued to provide good model fit (Table 8.28).

Table 8.28: Model Fit Indices for Respecified Univariate Information Seeking Growth Models

| | $\chi^2$ | df | $\chi^2$/df | TLI | CFI | RMSEA |
|---|---|---|---|---|---|---|
| Career Development | 20.036 | 14 | 1.431 | .998 | .993 | .036 |
| Job Content | 22.683 | 14 | 1.620 | .998 | .999 | .043 |
| Social Atmosphere | 27.723* | 14 | 1.980 | .996 | .998 | .054 |
| Financial Rewards | 32.115 | 23 | 1.396 | .998 | .999 | .035 |
| Work-Life Balance | 31.506 | 20 | 1.575 | .998 | .999 | .042 |

* $p < .05$

Table 8.29 presents, for each dimension of information seeking, the standardized structural parameter estimates of the direct effects from the growth factors to the four outcome variables. As shown in Table 8.28, there are significant effects from the *intercept factor* of information seeking about *job content* and *social atmosphere* on all four outcome variables. The intercept factor of *career development* only had a significant effect on the global perception of organizational inducements, while for financial rewards and work-life balance the effect of the intercept factor was never significant. Again the effects of the shape factors (if not fixed at zero) were non-significant for all types of inducements. Together these findings suggest that a ***relationship exists between information seeking at organizational entry and newcomers' general evaluations of and satisfaction with their employment relationship one year after entry.***

Table 8.29 shows that differential patterns of intercept parameter – outcome associations existed across the five types of inducements, which provides additional support for the *discriminant validity among the psychological contract dimensions.* Apparently information seeking about job content and social atmosphere have the strongest impact on newcomers' general satisfaction with their employment relationship after one year.

Table 8.29: Standardized Structural Parameter Estimates of Direct Effects from Growth Factors to Outcomes

| | Perception of Inducements | Evaluation of Promise Fulfillment | Satisfaction | Met Expectations |
|---|---|---|---|---|
| CAREER DEVELOPMENT | | | | |
| Intercept | .154* | .051 | .039 | .054 |
| Shape | -.027 | .145 | -.005 | -.071 |
| JOB CONTENT | | | | |
| Intercept | .207** | .188** | .204** | .160* |
| Shape | .128 | .019 | .040 | .134 |
| SOCIAL ATMOSPHERE | | | | |
| Intercept | .257** | .199** | .225** | .171* |
| Shape | .010 | -.046 | .052 | .025 |
| FINANCIAL REWARDS | | | | |
| Intercept | .071 | .020 | .068 | .010 |
| Shape | - | - | - | - |
| WORK-LIFE BALANCE | | | | |
| Intercept | .071 | .020 | .068 | .010 |
| Shape | - | - | - | - |

* $p < .05$; ** $p < .01$

### 8.4.4. Relationship between Information Seeking and Perceived Promises over Time

Although we had not formulated any specific hypotheses, we have further explored the role of information seeking in psychological contract development by assessing the relationship between information seeking and changes in perceived promises. According to Rousseau (1995), information seeking enhances the development of a positively experienced psychological contract because newcomers who actively search for information about what they can expect of their organization, bring their expectations better in line with reality based on this information. Thus, experiences become incorporated in the mental model of the employment relationship and over time this should decrease the risks of disappointments due to unfulfilled promises. This proposition can be verified in two steps. First, it implies that changes in perceived promises over time should be related to perceived promise fulfillment. Second, it implies that changes in perceived promises should be related to changes in information seeking.

Impact of Changes in Perceived Promises on Evaluations of Employer Inducements after One Year

To assess the impact of changes in perceived promises on perceptions of employer inducements and on the evaluation of employer promise fulfillment after one year, we followed the same procedure as for assessing the impact of information seeking on both outcomes. We departed from the univariate growth models for perceived employer promises. For each of the five types of inducements, the univariate growth model that best described the change trajectory of perceived promises was respecified to include the outcome variables (i.e. perception of inducements at T4 and evaluation of promise fulfillment at T4). For promises about job content, social atmosphere and work-life balance we departed from the optimal growth model. For career development and financial rewards, we departed from the no-growth model (cf. Table 8.10). Although this no-growth model actually provides no information on the influence of changes in perceived promises on the outcome variables, we decided to assess also the possible influences of initial status of perceived promises about all types of inducements on the outcome variables after one year. This allows us to understand if the *changes* in perceptions account for the outcome variables, or simply the *initial state* of perceptions with which newcomers enter the employment relationship.

Table 8.30: Model Fit Indices for Respecified Univariate Growth Models for Perceived Promises

| | $\chi^2$ | df | $\chi^2$/df | TLI | CFI | RMSEA |
|---|---|---|---|---|---|---|
| Career Development | 18.975* | 10 | 1.897 | .998 | .998 | .052 |
| Job Content | 6.558 | 4 | 1.639 | .999 | 1.000 | .038 |
| Social Atmosphere | 2.660 | 4 | 0.665 | 1.001 | 1.000 | .000 |
| Financial Rewards | 42.486** | 10 | 4.249 | .990 | .994 | .099 |
| Work-Life Balance | 15.203* | 4 | 3.801 | .993 | .998 | .046 |

* $p < .05$; ** $p < .01$

All respecified models continued to provide good model fit, as shown in Table 8.30. The only exception is financial rewards, for which the RMSEA fit index is too high. This was also the case with the univariate growth model.

In Table 8.31, for each type of employer inducements, the standardized structural parameter estimates of the direct effects of the growth factors to both outcome variables are summarized. As can be seen from this table, the effect of the *shape factor* on the perception of inducements received is always significant and positive, suggesting that newcomers who *increase* their perceptions of employer promises over time, believe they received more inducements from their organization at T4. The influence of the shape factor on perceived promise fulfillment is only significant for promises about work-life balance; changes in perceived promises about job content and social atmosphere have no significant impact on the evaluation of promise fulfillment at T4.

Table 8.31: Standardized Structural Parameter Estimates of Direct Effects from Growth Factors to Outcomes

| | Perception of Inducements | Evaluation of Promise Fulfillment |
|---|---|---|
| **CAREER DEVELOPMENT** | | |
| Intercept | .375** | .219** |
| Shape | - | - |
| **JOB CONTENT** | | |
| Intercept | .730** | .420** |
| Shape | .405** | .120 |
| **SOCIAL ATMOSPHERE** | | |
| Intercept | 430** | .359** |
| Shape | .224* | .160 |
| **FINANCIAL REWARDS** | | |
| Intercept | .434** | .204** |
| Shape | - | - |
| **WORK-LIFE BALANCE** | | |
| Intercept | .609** | .496** |
| Shape | .611** | .457** |

* $p < .05$; ** $p < .01$

There is also a consistent and significant positive influence of the *intercept factors* on perceived inducements and on the evaluation of promise fulfillment. Apparently, *newcomers who started off with stronger perceptions of promises about employer inducements and/or who increased their perceptions during the socialization process are more positive about the extent to which they actually receive these inducements after one year, than newcomers with lower perceptions of employer promises. With respect to work-life balance, they also make up a more positive evaluation of promise fulfillment*

Associations between Changes in Information Seeking and Changes in Perceived Promises

In a second step we have assessed the relationship between information seeking and changes in perceived promises. We first assessed this relationship using *hierarchical regression analyses*, by regressing perceived

promises at T3(T4) on control variables (step 1), perceived promises at T1(T3) (step 2) and information seeking at T1(T3) (step 3). We decided to use regression analysis since this would inform us if information seeking has discrete effects on changes in information seeking both at T3 and T4 separately. However, the results of these analyses showed that *there were no significant effects of information seeking on subsequent changes in perceived promises.* Therefore, they are not reported here. This finding suggests that the relationship between information seeking and perceived promises should not be conceptualized as a series of discrete relationships. It could be that it rather is a global process that develops as a relationship continues, whereby the accumulation of information seeking could merge to affect broad changes in employees' perceived promises over longer time periods.

To further assess whether there exists a relationship between information seeking and perceived promises over time, we have conducted ***cross-domain analyses*** between the latent growth models for both variables (i.e. ***multivariate latent growth modeling***). For each type of inducement we simultaneously fitted the change trajectory of information seeking and the change trajectory of perceived promises and we assessed the relationship between both variables' intercept and shape factors. The global fit indices for these models are represented in Table 8.32. in Table 8.33 we present the latent correlations among growth parameters of information seeking and perceived promises for each type of employer inducements.

Table 8.32: Model Fit Indices for Respecified Univariate Growth Models for Perceived Promises

| | $\chi^2$ | df | $\chi^2$/df | TLI | CFI | RMSEA |
|---|---|---|---|---|---|---|
| Career Development | 39.729* | 22 | 1.806 | .997 | .997 | .049 |
| Job Content | 23.791 | 17 | 1.399 | .999 | .999 | .035 |
| Social Atmosphere | 34.892* | 17 | 2.052 | .995 | .997 | .056 |
| Financial Rewards | 70.009** | 28 | 2.500 | .993 | .993 | .067 |
| Work-Life Balance | 26.663 | 17 | 1.568 | .997 | .998 | .041 |

* $p < .05$; ** $p < .01$

Table 8.33: Latent Intercorrelations among Growht Parameters of Information Seeking and Perceived Promises

| | | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| CAREER DEVELOPMENT | 1. Initial Status – IS | | | | |
| | 2. Change – IS | -.556** | | | |
| | 3. Initial Status – PP | .287** | -.062 | | |
| | 4. Change – PP | - | - | - | |
| JOB CONTENT | 1. Initial Status – IS | | | | |
| | 2. Change – IS | -.368** | | | |
| | 3. Initial Status – PP | .169* | -.033 | | |
| | 4. Change – PP | -.133 | .027 | -.638** | |
| SOCIAL ATMOSPHERE | 1. Initial Status – IS | | | | |
| | 2. Change – IS | -.316 | | | |
| | 3. Initial Status – PP | .478** | -.315* | | |
| | 4. Change – PP | -.255 | .259 | -.379* | |
| FINANCIAL REWARDS | 1. Initial Status – IS | | | | |
| | 2. Change – IS | - | | | |
| | 3. Initial Status – PP | .274** | - | | |
| | 4. Change – PP | - | - | - | |
| WORK-LIFE BALANCE | 1. Initial Status – IS | | | | |
| | 2. Change – IS | -.327 | | | |
| | 3. Initial Status – PP | .189* | -.043 | | |
| | 4. Change – PP | -.050 | .028 | -.312* | |

* $p < .05$; ** $p < .01$

As can be seen from Table 33, there is always a significant and positive association between the intercept factor for information seeking and the intercept factor for perceived promises. This suggests that at entry, newcomers who believe more promises have been made by their employer, also engage more frequently in information

seeking about these promises. In view of the cross-sectional nature of these relationships, these positive associations could be somewhat inflated due to common method variance and it is not possible to interpret the direction of these relationships: it could be that more information seeking during the first weeks has increased perceived promises at T1 or that those newcomers who enter the organization with initially higher promissory beliefs, also pay more attention to obtaining information about these promises.

The association between the change factors of information seeking and perceived promises is never significant, so our expectation that rates of changes in information seeking are associated with rates of changes in perceived promises is not confirmed by our data.
Other cross-domain associations are the correlations between initial status in information seeking and rate of changes in perceived promises. This correlation is never significant. The correlation between initial status of perceived promises and rate of change in information seeking is always negative but it is only significant for social atmosphere. This negative relationship means that for social atmosphere, newcomers who started off with a higher level of perceived promises, decrease their level of information seeking at a rate faster than those who started off with a lower level of perceived promises.

### 8.4.5. Summary of Findings

Our findings suggest that ***for career development, job content, and social atmosphere, newcomers' contract-related information-seeking behaviors are positively related to their perceptions of inducements received from the organization and to their evaluations of employer promise fulfillment.*** This relationship is significant with respect to the *initial status of information seeking*, suggesting that newcomers who started off with a higher frequency of contract-related information seeking, are more positive about employer inducements after one year than those who started off with a lower frequency. The rate of change in information seeking over the first year of employment has no significant impact on evaluations of employer inducements after one year. When we further explored these findings in a more stepwise manner, using hierarchical regression analyses, we also found that information seeking at later time points did not explain additional variance in perceptions of inducements and of promise fulfillment above and beyond the variance explained by information seeking at T1.

To further explore this finding, we have built on Rousseau's (1995) thesis that information seeking is positive for newcomer psychological contract evaluation because newcomers use this information to adapt their perceptions to the reality as they encounter it. This adaptation would increase the likelihood of a positive evaluation of the psychological contract. We therefore assessed whether changes in perceived promises over time are related to newcomers' perceptions of inducements received and promise fulfillment after one year. Our results indicate that ***both initial status and the rate of change in perceived promises are positively related to evaluations after one year.*** Contrary to our expectations, ***this relationship is positive.*** It implies that newcomers who increase their perceptions of promises over time at a faster rate, are more positive about the inducements they receive from the organization after one year. With respect to work-life balance they are also more likely to make up a positive evaluation of promise fulfillment after one year. Newcomers starting off with a higher level of perceived promises also make up a more positive evaluation after one year.

Our results thus suggest that ***both information seeking and perceptions of promises are positively related with newcomers' evaluations of their psychological contract after one year.*** However, when we relate the changes in information seeking and perceptions of promises over time, these relationships are not straightforward if we examine them from time-point to time-point. Hierarchical regression analyses showed that information seeking does not affect subsequent changes in perceived promises. To assess the global association between changes in information seeking and perceived promises we also conducted multivariate LGM. The results of these analyses show that ***there is a significant association between the initial status of information seeking and perceived promises at entry but that there are no associations between the change rates for both variables.*** We had no a

prior explanation for the former finding; it could be that newcomers who had already searched more frequently for information during their first weeks at work, perceive more promises at initial status. Or, inversely, it could be that newcomers who start off with higher promissory beliefs about employer inducements also spend more attention to seeking information about these inducements. Since the initial status of both variables refers to the same measurement occasion, we should be cautious with interpreting this finding.

## 8.5. DISCUSSION

The purpose of the longitudinal part of this study was to examine newcomer psychological contract development during the socialization process. Because this is one of the first studies to address psychological contract development, we have formulated three specific research questions that focus on different aspects of the changes occurring in newcomers' psychological contracts during the socialization process. Based on our literature review, a number of hypotheses were formulated and tested in order to answer these questions. Together our results provide relevant information for increasing our understanding of newcomer psychological contract development. In Table 8.34 we have summarized our hypotheses together with the extent to which they are supported by our empirical data.

Table 8.34: Overview of Hypotheses and the Support Obtained from our Empirical Data

| | | |
|---|---|---|
| H1A | Increase in newcomers' perceptions of organizational promises over time | Supported |
| H1B | Decrease in newcomers' perceptions of organizational promises over time | No support |
| H2C | Decrease in newcomers' perceptions of employee promises over time | No support |
| H2D | Increase in newcomers' perceptions of employee promises over time | Supported |
| H3A | Decrease in newcomers' perceptions of organizational inducements received over time | Supported |
| H3B | Decrease in newcomers' evaluations of organizational promise fulfillment over time | Supported |
| H4A | Increase in newcomers' perceptions of employee contributions over time | Supported |
| H4B | Increase in newcomers' evaluations of employee promise fulfillment over time | Supported |
| H5A | Decrease in newcomer information seeking about organizational inducements over time | Supported |
| H5B | Decrease in newcomer information seeking about employee contributions over time | Supported |
| H6A | Positive relationship between newcomers' perceptions of inducements received and subsequent perceptions of organizational promises over time | Supported |
| H6B | Positive relationship between newcomers' evaluations of organizational promise fulfillment and subsequent perceptions of organizational promises over time | Supported |
| H7A | Positive relationship between newcomers' perceptions of contributions made and subsequent perceptions of employee promises over time | Supported |
| H7B | Positive relationship between newcomers' evaluations of employee promise fulfillment and subsequent perceptions of employee promises over time | Supported |
| H8A | Positive relationship between newcomers' perceptions of inducements received and subsequent perceptions of employee promises over time | Supported |
| H8B | Positive relationship between newcomers' evaluations of organizational promise fulfillment and subsequent perceptions of employee promises over time | Supported |
| H9A | Positive relationship between newcomers' perceptions of contributions made and subsequent perceptions of organizational promises over time | Partial support |
| H9B | Positive relationship between newcomers' evaluations of employee promise fulfillment and subsequent perceptions of organizational promises over time | Partial support |
| H10A | Positive relationship between frequency of information seeking during socialization and perceptions of organizational inducements one year after entry | Partial support |
| H10B | Positive relationship between frequency of information seeking during socialization and evaluations of organizational promise fulfillment one year after entry | Partial support |
| H10C | Positive relationship between frequency of information seeking during socialization and met expectations one year after entry | Partial support |
| H10D | Positive relationship between frequency of information seeking during socialization and general satisfaction one year after entry | Partial support |

In this section we discuss our empirical findings in view of our hypotheses. First, we discuss the changes in newcomers' psychological contracts during socialization (section 8.5.1). Second, we discuss the role of the adaptation and reciprocity principles in explaining changes in newcomers' promissory beliefs (section 8.5.2). Third, we discuss the role of newcomer information seeking in psychological contract development (section 8.5.3). We end this section with a further discussion of the relationship promissory beliefs and psychological contract evaluations (section 8.5.4).

Before addressing these longitudinal findings, it is important to note that in the first section of this chapter we have provided ***further evidence for the validity of our psychological contract scales***. The results of our *longitudinal measurement invariance tests* show that the items used to measure each of the psychological contract dimensions are referring to the same content domain over time. This observation suggests that changes in newcomers' psychological contracts are not caused by changes in the underlying meaning of the constructs (Chan, 1998; Vandenberg & Lance, 2000). This adds to the evidence on the reliability and validity of our scales, described in Chapter 6. The fact that this information is obtained based on data collected at different occasions and with reference to different facets of the psychological contract, makes it more robust than if this evidence was only based on only one data collection or with respect to only one facet of the psychological contract.

### 8.5.1. Changes in Newcomers' Psychological Contracts during the Socialization Process

Research question 2A addressed the univariate changes in newcomers' psychological contract perceptions and evaluations and in their information-seeking behaviors over time. Most longitudinal studies on newcomer socialization (e.g. Morrison, 1993a; 1993b; Ostroff & Koslowski, 1992; Saks & Ashforth, 1997b) have examined change at the aggregate level. The few existing studies that have addressed changes in newcomers' psychological contracts (Robinson *et al.*, 1994; Thomas & Anderson, 1998) also assessed changes by comparing mean scores obtained at different data collection waves. This type of analysis provides information on the amount of change for a group of newcomers but it does not provide an adequate conceptualization and analysis of intraindividual changes over time. In other words, it cannot answer questions concerning the form of the intraindividual change trajectory or about interindividual differences at initial status and in the rate of intraindividual change (Chan & Schmitt, 2000; Willet & Sayer, 1994). Building on Chan & Schmitt's (2000) attempt to model newcomer information seeking and adaptation during organizational socialization, we investigated the *univariate changes in newcomers' psychological contracts (perceived promises, actual experiences and evaluation of promise fulfillment) and in contract-related information seeking during the first year of employment using latent growth modeling*. In Chapter 5, we formulated hypotheses about the direction of these change trajectories.

For ***changes in perceived promises*** we proposed two alternative pairs of hypotheses. The first pair was based on the more instrumental approach to psychological contracts described by Robinson *et al.* (1994) who proposed that after organizational entry changes in the psychological contract are characterized by increasing perceptions of employer promises and decreasing perceptions of employee promises (H1A and H1C). The second pair was based on Rousseau's (1995) argumentation that, following the principles of realistic expectations theories, after entry newcomers decrease their perceptions of employer promises while increasing their perceptions of employee promises (H1B and H1D). Our results suggest a combination of both groups of propositions. They reveal both an *increase in promissory beliefs about employer inducements* (thereby supporting H1A) and an *increase in promissory beliefs about employee contributions* (thereby supporting H1D).

Thus, during the first year of the employment relationship, newcomers increase their expectations towards their employer and they also increase their expectations regarding their own contributions. The first observation is in line with the results obtained by Thomas & Anderson (1998) and Robinson *et al.* (1994). The second observation contrasts with the findings obtained by Robinson *et al.* (1994), who observed a decrease in perceived employee

obligations during the first two years after entry. Apart from these studies no further empirical information is available on changes in newcomers' psychological contract perceptions, making it difficult to interpret our results in view of the existing research literature. Moreover, because of the two-year time span between both measurement occasions in the study conducted by Robinson *et al.* (1994) we do not know whether the different results are due to the time span (it might be possible that a decrease in perceived employee promises only occurs after the first year) or to other factors.
Our findings suggest the development of a positive spiral of increasing promissory beliefs about both employher inducements and employee contributions, which could indicate an unfolding relationship based upon reciprocity and trust (Blau, 1964; Homans, 1961). The principles underlying the changes in promissory beliefs have been further assessed in research question 2B and will be discussed in the subsequent section.

Our findings with respect to ***changes in newcomers' actual experiences and their evaluations of promise fulfillment*** largely support hypotheses 3 and 4. Following Rousseau (1995) we proposed that with increasing experience within the organization newcomers would become more likely to make up a negative evaluation of actual inducements received and of promise fulfillment by their employer. For those types of inducements for which changes were observed, the direction of the changes were in the proposed direction, indicating *an increasingly negative evaluation of organizational inducements.* This finding suggests that the mechanism of realistic expectations might operate at the level of psychological contract evaluations rather than at the level of promissory beliefs. It might be that newcomers start with an overly positive evaluation of the inducements offered to them and that they bring this evaluation more in line with reality over time. To assess whether this decrease in evaluations reflects the principle of adapting evaluations to reality, it is needed to relate evaluations and changes in evaluations to more distal outcomes such as satisfaction or commitment.
Also in line with our hypothesis, we observed that over time newcomers tend to *increase their evaluations of the contributions they make to the organization.* This increase could be explained by the tendency of individuals to overestimate their own contributions and to underestimate the contributions made by others, as proposed by Robinson *et al.* (1994).

No prior studies have assessed ***changes in newcomer information seeking about the psychological contract.*** Therefore we developed our hypotheses based on the theoretical propositions put forward by Rousseau (1995) and Shore & Tetrick (1994) and on the evidence available within the socialization literature (e.g. Chan & Schmitt, 2000; Louis, 1990; Morrison, 1993a; 1993b; Ostroff & Koslowski, 1992). We expected that over time there would be a decrease in the frequency of newcomer information seeking about the inducements they can expect of their employer as well as about the contributions they should make to the organization (H5). This hypothesis was based on the assumption that after several months the basic terms of the employment relationship become established within the psychological contract schema, thereby making information processing more automatic (Rousseau, 1995; 2001b; Shore & Tetrick, 1994). Another reason is that over time the social costs of information seeking will increase (Ashford, 1986; Morrison, 1993a). *Our results show a decrease in contract-related information seeking* and this finding supports our propositions. They are thus a first empirical confirmation of one aspect of the theories on psychological contract development proposed by Rousseau (1995) and Shore & Tetrick (1994) and they are in line with previous findings on information seeking reported within the socialization literature (Morrison, 1993a; Ostroff & Koslowski, 1992). Comparing our findings with the types of information studied within this literature, it suggests that contract-related information could be added to the categories of information sought by newcomers during socialization. According to Morrison (1993b) over time newcomers become more integrated within the organization and thus decrease their search for information about cultural or normative information; on the other hand they become more concerned with performance evaluations and thus increase their search for feedback. Our results suggest that information about psychological contract terms could be situated within the first category of information types.

Three general observations are important to note. First, it is noteworthy that the specific nature of the intraindividual change (i.e., the functional form and direction of the change trajectory) is dependent on the

***content dimension of the psychological contract.*** This supports our conceptualization of the psychological contract as a multidimensional construct. Second, the functional forms of the change trajectories indicate that in most cases changes do not follow a linear form, suggesting the existence of ***differences in the change processes occurring during the encounter and acquisition stages of socialization.*** Finally, for all variables systematic ***interindividual differences*** exist at initial status and for several variables there are also interindividual differences in terms of the rate of change over the socialization period. Part of the interindividual differences at initial status can be explained by individual antecedents, as we have described in Chapter 7.

In summary, the significant findings for changes in newcomers' psychological contracts during organizational socialization support the notion of the ***psychological contract as a dynamic construct*** *that develops over time as the employment relationships evolves.* The fact that we observed changes in the psychological contract supports the assumption that the psychological contract should be differentiated from more stable dispositional characteristics. The subsequent research questions further address the mechanisms that could explain these changes.

### 8.5.2. Influence of Psychological Contract Evaluations on Changes in Promissory Beliefs over Time

Research question 2B further addressed the changes in perceived promises about employer inducements and employee contributions, by assessing the impact of intermediate evaluations of inducements and contributions on changes in perceived promises during the socialization process. This question departs from the question originally formulated by Louis (1980): *How do newcomers cope with the experiences they encounter during organizational entry? How do they come to understand, interpret, and respond in and to unfamiliar organizational settings?* (1980: 229). It builds on the seminal work of Salancik & Pfeffer (1978) who proposed that employees, as adaptive organisms, adapt their perceptions and attitudes to (1) their own behaviors and (2) to the situation and the behaviors of others. We applied their thesis by assessing the impact of the principles of (1) adaptation and (2) reciprocity on changes in perceived promises. We first discuss our findings with respect to the adaptation principle (8.5.2.1). This is followed by a discussion of the results relating to the reciprocity principle (8.5.2.2.). In the subsequent sections we discuss the distinctive results for actual experiences and promise fulfillment in affecting changes in perceived promises (8.5.2.3) and the differences between content dimensions of the psychological contract (8.5.2.4).

In general, it is worth noting that the measures of perceived promises at T1 and T3 were always strongly predictive of their respective measures at T3 and T4. Together with the relatively small but significant changes in perceived promises observed using LGM, This suggests that early levels of promissory beliefs are highly important in determining later promissory beliefs. It is important to note that the effects of intermediate evaluations are above and beyond those effects of earlier measures of perceived promises.

#### *8.5.2.1. Adapting Perceptions to Evaluations of the Psychological Contract*

Our results generally support our proposition that ***during the socialization process newcomers adapt their perceptions of the promises they have exchanged with their employer as a function of the reality they encounter.*** This confirms the notion of Salancik & Pfeffer (1978) that employees change their perceptions as a function of their own behavior through retrospective processes. While adaptations of perceived employer promises mainly occur during the encounter stage of socialization, adaptations of perceived employee promises occur during both socialization stages.

Adaptation of Perceived Employer Promises to Actual Experiences

The positive relationship between the evaluation of employer inducements and subsequent changes in perceived employer promises indicates that ***during the first months of their new employment relationship newcomers adapt their perceptions of what their employer has promised them as a function of their intermediate***

***evaluations of what they actually receive from their employer*** (H6). Newcomers who make up a positive evaluation subsequently increase their perceptions, while newcomers who make up a negative evaluation subsequently decrease their perceptions of promises. Our results suggest that *the adaptation principle operates to a stronger extent during the encounter stage than during the acquisition stage*. This finding corresponds with the proposition that changes in psychological contract perceptions are mainly prevalent during the first months after entry because this period is characterized by intense information exchange between the newcomer and the organization in order to reduce uncertainty (Anderson & Thomas, 1996; Nelson *et al.*, 1991). It also supports Rousseau's (1995; 2001b) conceptualization of the psychological contract as a cognitive schema of the employment relationship comprised of promises about what employers and employees each should contribute. As explained by social-cognitive theories on schema development, *it is mainly when new schemas are developed that active attention is paid to changing perceptions as a function of concrete experiences* (Fiske, 1993; Fiske & Taylor, 1984). Over time, these newly developed schemas become more stable and individuals become less likely to adapt their schemas to reality (Fiske, 1993; Fiske & Taylor, 1984). Relating this to our findings it suggests that perceptions of employer promises comprised in newcomers' psychological contract schemas are subject to changes during the first months after entry, but that changes become less likely during the subsequent months.

Adaptation of Perceived Employee Promises to Actual Experiences

Our findings show that during the socialization process ***newcomers also adapt their perceptions of their own promises as a function of their experiences*** (H7). This positive relationship indicates that newcomers who believe to contribute much to their organization tend to increase their perceptions of promises they have made to their employer. During the encounter stage only the perception of promises about loyalty is not significantly affected by actual experiences or promise fulfillment. Apparently, newcomers do not relate the fact that they are being loyal at the moment of the survey to their promises about loyalty. Our findings show that *the adaptation of promises to reality continues during both socialization stages.* When we compare these results with the results for the adaptation of perceived employer promises, this suggests that *newcomers allow themselves a longer period to bring their perceptions in line with reality with respect to their own contributions than with respect to employer inducements*. This difference could be explained based upon the social-cognitive literature on schema development (Fiske, 1993; Fiske & Taylor, 1984). Fiske (1993) argues that individuals are concerned about *retaining cognitive consistency* between their mental schemas and reality. Concerning their own contributions, it is easier for employees to change their schema about their own promises as a function of actual experience than they can change schemas about their employer's promises. In addition, individuals are also motivated to evaluate their own contributions in a positive way because a negative self-evaluation is unpleasant and tends to be avoided. In case of a negative evaluation of contributions, this can be reduced by decreasing their perceptions of promises made. As proposed by Rousseau (2001b), the *adaptation of schemas to reality usually happens in a functional way for the employee*. For example, employees who are not behaving in a flexible way can easily decrease their perceptions about the promises they have made about flexibility in order to avoid a negative self-evaluation. This will not touch their expectations of the employment relationship in general and it will allow them to retain their self-image as good employees who live up to what they have promised. But inversely, employees who find the social atmosphere or job content to be less than expected, will be less likely to decrease their perceptions of promises made by their employer about these inducements because it is less dissonant to be unsatisfied about the other party to the employment relationship than about oneself. This also corresponds with the proposition put forward by Heath *et al.* (1993), that *employees develop a rather stable pattern of expectations concerning the inducements they are entitled to received from their employer and that they are less flexible to adapt these expectations to reality.*

#### *8.5.2.2. Impact of the Reciprocity Principle on Changes in Perceived Promises*

Our findings show that ***the reciprocity principle already operates during the socialization period*** *and that it* ***affects changes in newcomers' perceptions of promises exchanged with their employer.*** *This relationship is*

*more explicative for changes in the perception of employee promises than for changes in the perception of employer promises.* For the latter, it confirms the notion of Salancik & Pfeffer (1978) that employees also change their perceptions as a function of the immediate social environment.

Reciprocating Employer Inducements with Changes in Perceived Employee Promises

Our results show that, during the encounter stage, newcomers who make up a positive evaluation of what they receive from their employer tend to increase their promises about the contributions they owe their employer. Or, inversely stated, that newcomers who make up a negative evaluation of what they receive subsequently decrease their perceptions of their own promises. This finding suggests **that *newcomers not only adapt their promises as a function of what they actually contribute to the organization but also as a function of what they receive from the organization.*** This is in line with what we proposed in hypothesis 8. It supports the validity of the norm of reciprocity as a central element in explaining the dynamics of the psychological contract. Our results show that the reciprocity norm also operates in psychological contract formation during the socialization period. They confirm prior studies that have addressed the reciprocity principle using samples of more senior employees (Coyle-Shapiro & Kessler, 2000a; 2000b) as well as studies about the impact of psychological contract fulfillment by the employer on subsequent employee attitudes and behaviors (Coyle-Shapiro & Kessler, 2000a; Robinson, 1996; Robinson & Morrison, 1995).

Our findings also suggest that *the reciprocity principle operates to a stronger extent during the encounter stage than during the acquisition stage.* During the acquisition stage, the evaluation of employer inducements only positively affects changes in employee promises about loyalty. This observation seems to contradict the prior studies we just referred to (Coyle-Shapiro & Kessler, 2000a; 2000b; Robinson, 1996; Robinson & Morrison, 1995), since these did not focus (exclusively) on the socialization period. This suggests that *psychological contract development is a continuous dynamic process in which several stages can be discerned.* For example, it is possible that after the changes in perceived promises occurring during the first months after entry there is a stage of stabilization or consolidation during which newcomers do not change their perceptions in order to restore balance, but that over time employees who become integrated within the organization restart to consider their promises as a function of what they receive from the organization. On the other hand, it is also possible that the difference between our findings and prior studies can be explained by the *different time spans* between data collections. In the study conducted by Coyle-Shapiro & Kessler (2000a; 2000b) the time span between both measures was 2,5 years and only senior employees were involved. Robinson *et al.* (1994) used a two-year time span (at entry and two years after entry), while Robinson (1996) and Robinson & Morrison (1995) report a time span of 2,5 years (at entry and 18 and 30 months after entry). None of these studies thus considered changes occurring during the first year of employment.

Reciprocating Employee Contributions with Changes in Perceived Employer Promises

The impact of the evaluation of employee contributions on changes in perceived employer promises is less clear and provides only partial support for hypothesis 9. In our study newcomers did not use an increased perception of organizational promises as "exchange" for their own contributions, suggesting that the reciprocity principle does not operate in the same way in both directions. *Apparently the norm of reciprocity operates to a stronger extent with respect to the promises employees make about their own contributions than with respect to their perceptions of employer promises.* A possible explanation is that employees consider their contributions more as "outcomes" of what they receive from their organization and that they change these outcomes more flexibly as a function of what they receive. In other words, they use their evaluations of inducements more as a criterion to determine their own commitments to the organization. These findings correspond with other types of relationships that are a central area of investigation within organizational behavior research, i.e. studies in which employees' attitudes and behaviors are assessed as dependent variables in relationship with diverse types of organizational practices, principles or inducements. It is also the typical focus of psychological contract research addressing the relationship between employer contract fulfillment and employee attitudes and behaviors (e.g. Kickul, 2001; Lester *et al.*, 2002; Robinson, 1996; Turnley & Feldman, 1999; 2000).

As far as we are aware, the inverse relationship has received only little or no empirical attention within existing psychological contract research. The only study we are aware of has been conducted by Coyle-Shapiro & Kessler (2000a). These authors also found a positive but less clear relationship between perceived employee promises and subsequent perceptions of organizational promises than inversely. It is possible that this *relationship is not linear* and that it therefore is not significant within regression analyses. For example, employees who believe to contribute much to the organization might increase their perceptions of employer promises but those who do not contribute much, or who believe to contribute less than promised, might not reduce their perceptions of organizational promises. The latter interpretation is also related to social-cognitive theories on schema development. Again, it appears that *newcomers are more flexible in adapting their schema about their own promises than about perceived employer promises*. This confirms the proposition by Heath *et al.* (1993) that *schemas about inducements expected from the employer are more stable than schemas about ones own contributions*.

Finally, we note that *our results provide little support for the equity principle*, as proposed by Robinson *et al.* (1994). According to these authors, over time newcomers should increase their perceptions of employer promises as a function of their own contributions and they should decrease their own promises as a function of what they have contributed already. With respect to the former, our results do not provide unequivocal evidence for the positive impact of employee contributions on changes in perceived employer promises. With respect to the latter, our results go in the opposite direction by showing that changes in perceived promises are positively instead of negatively affected by newcomers' evaluations of their contributions.

#### *8.5.2.3. Perception of Actual Experiences versus Evaluation of Promise Fulfillment*

In general our findings show that ***the perception of actual experiences more strongly affects changes in perceived promises than the evaluation of promise fulfillment does***. This seems to be contradictory to Rousseau's (1995) proposition that it is the violation of the promissory element that is central in the relationship between psychological contract evaluations and employee attitudes and behaviors. She proposes that the violation of a promise has a stronger negative impact than the mere observation that certain inducements are not provided. For example, the absence of concrete possibilities for career development would have a less strong impact on employee attitudes and behaviors than the evaluation that promises about career development are not lived up to. Rousseau (1995) only considers the evaluation of employer promises. It is less clear whether the same argument holds for employee promises. Several explanations can be given for the difference between our findings and Rousseau's (1995) proposition. A first explanation is based upon the *operationalization of promise evaluation*. As discussed in Chapter 2, there exists no standardized measurement of the evaluative facet of the psychological contract in the literature. In our study we used a positively formulated measure (we asked respondents to indicate to which extent promises were being fulfilled), while Rousseau (1995) considers violations of promises and also operationalizes them in terms of violations. For instance in the study conducted by Robinson *et al.* (1994) respondents had to indicate the extent to which promises were violated instead of fulfilled. It is possible that the measurement of violations has a stronger impact than the measure of fulfillment of promises because both terms might evoke different reactions from employees. The term "violation" could evoke a more negative reaction than the non-fulfillment of promises. A second explanation concerns the *type of relationships* being studied. It might be that the evaluation of promises more strongly affects subsequent employee attitudes and behaviors than that it affects changes in perceived promises. A third explanation is offered by the social-cognitive theories on schema development, from which we can expect a stronger impact of actual experiences than of the evaluation of promise fulfillment. Fiske & Taylor (1984) argue that the *salience of an event or information will affect changes in individuals' schemas*. It is likely that in our study newcomers' perceptions of actual experiences are more salient than the evaluation of promise fulfillment because the latter requires a reflection about the past period and a comparison of actual experiences with earlier made promises. Probably this makes this evaluation more abstract and less salient than actual experiences, thereby having less impact on changes in perceived promises.

#### *8.5.2.4. Distinction between Content Dimensions of the Psychological Contract*

Our findings suggest that, although the relationships for different psychological contract dimensions always go in the same direction, the significance of the relationship depends on the content dimension of inducements or contributions. This observation supports the conceptualization of the psychological contract as a multidimensional construct. It shows that, in order to better understand the dynamics of psychological contract development, it is interesting to take into account these dimensions instead of considering it as a holistic, unidimensional construct. Although further research is needed to validate the distinction between content dimensions, our results suggest that changes in perceived promises about different content dimensions could be affected differently by actual experiences or that these changes become less or more prevalent at different stages of the employment relationship. For example, our results suggest that during the socialization period the perception of employer promises relating to job content are most strongly affected by the principles of adaptation and reciprocity. Concerning employee contributions, employee promises relating to in & extra role behavior and flexibility are most strongly affected during this period. Together this suggests that *during the socialization period, promises about those types of inducements and contributions that are most strongly related to the job are most subject to changes as a function of the reality encountered after organizational entry.* Probably these dimensions are most relevant to newcomers and probably most information exchanged between employer and employee during the initial stages of the employment relationship will be focused on job-related aspects, compared to other dimensions like, for example, ethical behavior or financial rewards. These dimensions also correspond most strongly with the content domains related to task mastery considered within the socialization literature. It is possible that, during later stages of the employment relationship, changes in other types of promises become more prevalent.

### 8.5.3. The Role of Information Seeking in Psychological Contract Development

Building on existing research within the socialization literature we investigated information seeking about the psychological contract during the socialization process. In section 8.5.1 we already discussed our findings about the changes in newcomers' information-seeking behaviors over time. In research question 2C we addressed the role of newcomer information seeking in explaining newcomers' psychological contract evaluations and their general adjustment after one year. A central assumption in socialization literature is that information seeking about different socialization aspects enhances newcomer adjustment (Bauer *et al.*, 1998; Morrison, 1993b; Saks & Ashforth, 1997a). We proposed that information seeking about the psychological contract would have comparable effects. We therefore examined the relationship between contract-related information seeking about the five dimensions of organizational inducements and newcomers' evaluations of these inducements one year after entry. In addition to this, we also examined whether the general effects of information seeking on measures of newcomer adjustment observed by socialization researchers also hold for contract–related information seeking. We discuss our findings in section 8.5.3.1. In order to better understand these results we further explored how contract-related information seeking is related to changes in promissory beliefs over time. These findings are discussed in section 8.5.3.2.

#### *8.5.3.1. Impact of Information Seeking on Psychological Contract Evaluations and Newcomer Adjustment*

Both Chan & Schmitt (2000) and Morrison (1993b) have made a distinction between more distal outcomes of information seeking like satisfaction or commitment, and more proximal outcomes that are more directly related to the type of information sought. As we have discussed in Chapter 4 (section 4.2.4), socialization research provides empirical evidence for the impact of information seeking on both types of outcomes (e.g. Morrison, 1993b; Ostroff & Koslowski, 1992; Saks & Ashforth, 1997b). Applying this distinction to information seeking about the psychological contract, we assessed the impact of seeking information about different types of inducements (a) on the *evaluation of these inducements* one year after entry using commensurate measures, and (b) on *global psychological contract evaluations, feelings of met expectations and satisfaction.* Both the specific and global measures of psychological contract evaluations can be considered as relevant indicators of

adjustment, given the evidence for the impact of psychological contract evaluation on important work-related attitudes and behaviors (e.g. Guest & Conway, 1998; Morrison & Robinson, 1995; Robinson *et al.*, 1994; Turnley & Feldman, 2000).

We conducted our analyses using latent growth modeling, following the procedures proposed by Chan & Schmitt (2000). These allow us to assess the impact of the *initial status* in information seeking and of *changes* in information seeking over time on outcome variables, taking into account both intraindividual changes and interindividual differences in intraindividual change.

Impact of Information Seeking about Inducements on the Evaluation of these Inducements

We expected that *contract-related information seeking would enhance newcomers' evaluations of the different content dimensions of employer inducements being part of their psychological contracts.* We proposed that newcomers who pay more attention to seeking information about the inducements they can expect of their employer during socialization become better informed about these inducements and therefore are more likely to make up a positive evaluation of the inducements actually received and of the degree of promise fulfillment about these inducements after one year (H10). Our hypothesis was confirmed for three dimensions of employer inducements, namely ***career development***, ***job content*** and ***social atmosphere***. For these dimensions we found that ***the more frequently newcomers engaged in seeking information, the more positive they were about the inducements they actually received and about the extent to which their employer had fulfilled its promises.*** These results suggest that *newcomers* ***socially construct*** *their evaluations of inducements by relying on the information they obtain from organizational insiders or other newcomers* (Salancik & Pfeffer, 1989). For financial rewards and work-life balance no significant relationships were found.

Since this is the first study to investigate the role of contract-related information seeking, we have no direct empirical information to compare our results with. Indirectly we can relate our findings to the results obtained by Morrison (1993a), who assessed the relationship between newcomer information seeking about socialization content areas and the attainment of different types of mastery after six months. She found that task mastery was significantly explained by performance feedback inquiry and by asking supervisors for technical information, while role clarity was explained by referent information and performance feedback. Acculturation was only explained by monitoring behaviors but not by active inquiry, and social integration was explained by both inquiring for normative information and monitoring. These results show that *different types of information are relevant for different types of socialization outcomes*. In the same sense, for career development, job content and social atmosphere, our findings suggest that information sought about these types of inducements enhances newcomers evaluations about these inducements.

The absence of a significant impact of information seeking about ***financial rewards*** and ***work-life balance*** on the evaluation of these types of inducements could be explained by the fact that these inducements are more economic and material in nature and that the employment deal is more explicit about them, thereby reducing the explicative power of information seeking. For example, financial rewards tend to be contractually specified and it is the dimension that is included in most conceptions of transactional psychological contracts (e.g. Robinson *et al.*, 1994; Rousseau, 1990). The same reasoning could be made for specifications about working hours and other aspects of work-life balance like holidays. These are often specified within the employment contract. Moreover, at each of the four data collections the mean scores for information seeking about financial rewards and work-life balance were lower than for the other three types of inducements (Table 8.4), suggesting that newcomers are less concerned about seeking information about these types of inducements during socialization.

In contrast, it is possible that for career development, job content and social atmosphere the original deal is more implicit or needs further elaboration and interpretation after organizational entry. This would thus mean that *information seeking is more explicative for those psychological contract dimensions that are more implicit and more subject to social constructions after organizational entry.*

Impact of Information Seeking on General Evaluations, Met Expectations and Satisfaction

Building on findings within the socialization literature about the relationship between information seeking about socialization contents and employee attitudes and behaviors (e.g. Morrison, 1993b; Ostroff & Koslowski, 1992; Saks & Ashforth, 1997b), we expected that contract-related information seeking would also positively affect these more general measures of newcomer adjustment. More specifically we assessed the impact of information seeking on the general perception of inducements received, the general evaluation of promise fulfillment, met expectations and satisfaction one year after entry.

Our findings show that *only **information seeking about job content and social atmosphere has a consistent impact on these more distal outcomes,** while information seeking about **career development** only had a significant impact on the global perception of inducements received* from the organization but not on the other three outcomes. *Again, no significant impact of information seeking about **financial rewards** and **work-life balance** was found.*

When we compare these results with empirical evidence within socialization research, we could explain these differential findings by *relating the content areas of the psychological contract to socialization content areas.* The content areas of information seeking typically studied within socialization research are technical information, referent information, normative information, performance feedback, and social feedback (Chan & Schmitt, 2000; Morrison, 1993b; Ostroff & Koslowski, 1992; Saks & Ashforth, 1997b). Comparing our dimensions of employer inducements with these socialization content areas, although this is a post-hoc comparison, the items we have used to measure job content and social atmosphere are most closely related to these socialization content areas. Within socialization research, technical and social information are considered to be important to the functioning of the newcomer within the organization. This might explain why these psychological contract dimensions show the strongest and most consistent impact on outcomes. It might be that those newcomers who pay more attention to the opportunities and challenges the organization offers them within their job become better informed about the possibilities they have and that this increases the likelihood of a generally positive evaluation of their employment relationship. A related reasoning could be made for social atmosphere: if a newcomer pays more attention to the social relationships at work he or she might be more likely to become integrated within the organizational culture because seeking this type of information could be an indication that the newcomer is concerned with the social aspects of the employment relationship and it could facilitate positive relationships with his or her colleagues. This in turn will give him or her more opportunities to discover the positive aspects the employment relationship.

In socialization literature, researchers generally do not use measures referring to financial rewards, work-life balance or career development since these are less related to role development and social integration. For *career development,* information seeking might probably be effective to discover the opportunities for career development but without having an impact on general indicators of adjustment. This could be due to the fact that career opportunities are typically not effectively experienced during the first year of employment, compared to experiences relating to job content and social atmosphere.

Our findings about the differential relationships between psychological contract dimensions and general evaluations and attitudes could thus be explained by the fact that *contract-related information seeking about job content and social atmosphere comes closest to information seeking about socialization knowledge.* They show that contract-related information seeking not only affects newcomers' evaluations of inducements and promise fulfillment about these dimensions but also their global perceptions and evaluations of their employment relationship. This brings the impact of contract-related information seeking one step closer to newcomer adjustment as studied within socialization research.

It is also relevant to note that we only found evidence for the *intercept factor*, i.e. for the *frequency of information seeking at organizational entry.* No effects for the rate of change in information seeking on

outcomes were found. Although the results of the univariate latent growth analyses show that for career development, job content and social atmosphere there are significant interindividual differences in the rate of decrease in information seeking, these differences have no impact on our outcome variables. This suggests that *early levels of information seeking rather than changes occurring over time are important in determining psychological contract evaluations, global satisfaction and met expectations.* Apart from the study conducted by Chan & Schmitt (2000), this is the first study to employ latent growth modeling to analyze changes in newcomer information seeking. Since these authors did not assess outcomes of information seeking it is difficult to compare this finding with their study. It seems to be in line with the proposition that the early months after entry are most important for newcomer sense-making (Ashforth & Saks, 1996; Morrison, 1993a; 1993b; Thomas & Anderson, 1998). The fact that information seeking decreases during the socialization process appears to have no negative effects on psychological contract evaluations.

#### *8.5.3.2. Relationship between Information Seeking and Changes in Promissory Beliefs*

We further explored the role of information seeking in psychological contract development by analyzing the relationship between information seeking and promissory beliefs over time. According to Rousseau (1995) newcomers will change their perceptions of promises exchanged with the organization as a function of the information they obtain. Multivariate latent growth analyses were performed to explore the possible cross-domain associations between initial status and rate of change in information seeking about each type of inducements and initial status and rate of change in perceived promises about these inducements. We only found significant and positive associations between the initial status of both variables. However, since these are situated at the same measurement occasion (T1) it is not possible to make a causal interpretation of this finding. Thus, *our empirical data provide no evidence for the existence of a relationship between information seeking and changes in promissory beliefs.* This lack of significant relationships was also observed when we assessed the relationship between both variables using hierarchical regression analyses. It might be that the relationship between information seeking and perceived promises cannot be conceptualized as a series of lock-step stages but rather as a continuous process that occurs gradually as the employment relationship continues, whereby the accumulation of information seeking over time could affect broad changes in employees' perceived promises.

We can relate our results to the findings obtained by Thomas & Anderson (1998) on *the role of socialization knowledge in psychological contract perceptions.* These authors found that knowledge obtained during the socialization period affects changes occurring in newcomers' psychological contract perceptions. More specifically, expectations towards the organization with respect to job security, family effects and social/leisure aspects increased as a function of socialization knowledge. *While Thomas & Anderson (1998) addressed more general* ***results*** *of information seeking, i.e. socialization knowledge, we focused on the* ***process*** *of information seeking about specific types of inducements* (that is supposed to result in increased knowledge about the content areas about which information is obtained). Comparing their findings with the results of our study, it appears that socialization knowledge is more predictive of changes than the processes of information seeking through which this knowledge is obtained.

Integrating our findings on information seeking, we can conclude that ***information seeking is positively related to psychological contract evaluations and to more general indicators of newcomer adjustment after one year*** However, further analyses suggest that *these relationships are not explained by changes occurring in perceived promises.*

### 8.5.4. Further Exploration of the Impact of Promissory Beliefs on Psychological Contract Evaluations

Although we had not formulated hypotheses on the impact of promissory beliefs on psychological contract evaluations, we have further explored this relationship in order to develop a further interpretation of our findings on psychological contract development. According to Rousseau (1995), changes in promissory beliefs during the

socialization process reflect an adaptation to reality and in her opinion this is enhanced by the information-seeking behaviors newcomers engage in. Our analyses of univariate changes in promissory beliefs about employer inducements and of the relationship between evaluations and perceptions of promises about inducements already indicated that such an adaptation process takes place and that adaptation to reality does not necessarily imply a *decrease* of promissory beliefs about inducements. Moreover, our results provide no indication of a significant association between changes in information seeking and changes in promissory beliefs. These observations are difficult to explain based upon the arguments put forward by Rousseau (1995).

According to Rousseau (1995), information seeking enhances positive psychological contract evaluations because information seeking enables employees to actively adapt their psychological contract schema to reality, thereby making promissory beliefs more realistic and decreasing the likelihood of disappointments. Rousseau (1995) implicitly assumes that this adaptation involves a decrease in perceived promises. Based on our data we assessed in an explorative way whether this argument could be relevant in explaining our findings about the relationship between information seeking and psychological contract evaluations. However, our results are contrary to what would be expected based on Rousseau's argument They suggest ***a positive relationship of initial promissory beliefs as well as changes in these beliefs with the perception of inducements received and the perceived fulfillment of promises after one year.*** A possible explanation for this observation is a "honeymoon" effect that could still be operating after one year.

Within the psychological contract literature, only the results reported by Robinson *et al.* (1994) provide some evidence to compare our findings with. Although these authors did not explicitly discuss the relationship between perceived employer obligations and psychological contract violation, inspection of correlations between both variables shows that promissory beliefs about employer obligations at entry and after 2 years are negatively related to perceived contract violation. This means that in this study promissory beliefs were also related to more positive psychological contract evaluations. Since the time span used by Robinson *et al.* (1994) is two years, the explanation in terms of a "honeymoon" effect probably is not valid. To further interpret our finding in light of existing research we have reviewed the available ***literature on newcomer expectations*** and related basic propositions to psychological contract theory.

Rousseau's (1995) proposition is based upon the basic assumption of ***literature on realistic expectations***. This literature states that newcomers start with unrealistically high expectations and that this subsequently causes feelings of unmet expectations (Dugoni & Ilgen, 1981; Irving & Meyer, 1994; Wanous *et al.*, 1992). Dugoni & Ilgen (1981) use *reality shock* to refer to situations in which newcomers experience that their expectations are not met. According to Irving & Meyer (1994), by lowering expectations, the risk of experiencing a reality shock is diminished and this should result in less dissatisfaction and decreased likelihood that newcomers leave the organization.

Several parallels between realistic expectations and psychological contract theory can be drawn. First, realistic expectations literature departs from the assumption that *initial expectations form the standards by which later experiences are evaluated* (Buckley *et al.*, 1998). This is closely related to the conceptualization of the psychological contract. Second, it is assumed that *the greater the differences between expectations and experiences, the larger the gap to which an individual must respond* (Irving & Meyer, 1994). This corresponds with theories on psychological contract violations, which reflect a gap between promissory beliefs and actual experiences (Morrison & Robinson, 1997; Robinson & Morrison, 2000). The *consequences* of the experience of this discrepancy is that *actions are undertaken to reduce it* (Buckley *et al.*, 1998). This is also comparable with propositions of psychological contract theory and with the empirical observations about the relationship between psychological contract violation and outcome variables reviewed in Chapter 2. However, the assumption that newcomers start with unrealistically high expectations, which Rousseau (1995) has also applied to newcomers' promissory beliefs, remains untested. According to Louis (1980) although "realism" suggests accuracy and appropriateness of expectations, it is usually operationalized merely as the inverse of expectation level. Lower expectations are considered as more realistic than are higher expectations. Our findings are in contrast with what would be predicted from realistic expectations literature.

One possible explanation is that most studies on realistic expectations measure these expectations without reference to content (e.g. "my expectations for this job are low"; Buckley *et al.*, 1998) Since we used content-specific measures of promissory beliefs and commensurate measures of outcomes this might explain the differences between our findings and these within realistic expectations literature. When we a posteriori conducted LGM on the relationship between changes in promissory beliefs and met expectations and satisfaction we found that, in contrast with the evaluation of content dimensions as outcome variables, there were only significant effects for social atmosphere. Initial promissory beliefs about social atmosphere were positively related to met expectations at T4, while changes in promissory beliefs about social atmosphere were positively related to satisfaction at T4. For the other four dimensions there was no impact on outcome variables. This suggests that *there are conceptual differences in the explanation of more distal outcome variables like satisfaction and met expectations than for the direct evaluation of content-specific promissory beliefs.*

On the other hand, in our review of literature on newcomer expectations we have found several studies that also report a ***positive relationship between pre-entry expectations and after-entry experiences or evaluations.*** According to Pulakos & Schmitt (1983), *"satisfaction is predictable at hire by knowing what outcomes individuals believe they will obtain from work"* (1983: 310). They empirically demonstrated that higher expectations were positively related to satisfaction. Mabey *et al.* (1996) also found positive associations between graduates' pre-entry expectations and job satisfaction and commitment both six months and six years after entry. They also observed a significant and positive correlation between commensurate measures of pre-entry expectations and post-entry experiences. In accordance with this, Buckley *et al.* (1998) observed significant and positive correlations between pre-entry expectations about rewards, comfort and responsibility and their perceptions of experiences relating to these three types of inducements one month and six months after entry. In view of our research focus, *the positive correlation between expectations and experiences is relevant and corresponds with our observations.* The impact of expectations is proposed to be positive during the initial stages of a new employment relationship because the way in which people respond to their environment is shaped, in part, by their expectations (Lance *et al.*, 2000; Miceli, 1985; Meyer, Bobocel & Allen, 1991). As we have discussed in Chapter 4 (section 4.3.2), Lance *et al.* (2000) have related the concept of *anticipatory met expectations* to the *anticipatory psychological contract*. They refer to the *"powerful role possessed by individual psychological contracts (how well the organization is projected to fulfill expectancies as formed from pre-entry experiences) in the sense that perceptions of met expectations represent evaluations of the nature of one's exchange relationship with the organization. The stronger the exchange relationship, the more likely individuals will adjust positively to the organization"* (2000: 116).

More generally, both the findings on the impact of pre-entry expectations as well as our findings of a positive relationship between promissory beliefs and psychological contract evaluations suggest that ***social psychological processes like cognitive dissonance, social cognition, and self-fulfilling prophecies*** are in place.

Using a ***cognitive dissonance explanation*** newcomers with high perceptions about promises might be inclined to be positive about the extent to which these promises are fulfilled in order to balance their evaluations with their expectations. If we relate this to our findings about the adaptation of promissory beliefs to inducements received and to the evaluation of promise fulfillment (discussed in section 8.5.2), this suggests that the adaptation principle also operates in the opposite direction: newcomers with high promissory beliefs adapt their evaluations to their beliefs instead of becoming more negative about the fulfillment of their beliefs. The sample of newcomers included in our longitudinal analyses only consisted of *stayers*, i.e. newcomers who are still working for the organization after one year. It might be that within this sample those newcomers with high promissory beliefs are more likely to evaluate these beliefs as being fulfilled after one year because a negative evaluation would be dissonant with their behavior (i.e. the fact that they are not leaving the company). Thus, in order to restore possible dissonance, they might have increased their evaluation of the situation.

In the same sense Lance *et al.* (2000) have proposed that newcomers with high perceptions of anticipatory met expectations start with the belief that their choice of a new employer was a good one. After entry they will tend to retain consistency of their evaluations of experiences with these initial expectations using what Meyer *et al.* (1991) have called *retrospective rationalizing processes,* i.e. the processes whereby recruits with high pre-entry expectations subsequently convince themselves that their choice of a new employment is actually as good as they had anticipated.

Another explanation is offered by the literature on ***social perception and cognition*** (e.g. Fiske, 1993; Fiske & Taylor, 1984). *Promissory beliefs may focus newcomers' attention to certain aspects of the environment and guide the interpretation of ambiguous stimuli.* In the previous chapter we have discussed how these principles might explain the relationship between individual characteristics, e.g. work values, and promissory beliefs. They might also be operating in explaining the relationship between promissory beliefs and subsequent evaluations of these beliefs. First, newcomers with higher initial promissory beliefs may *attend more selectively to certain stimuli in the environment* than those with lower initial promissory beliefs. If organizations present more stimuli than can be cognitively processed, newcomers may selectively perceive different parts of the environment. Given that all organizational environments have both positive and negative features, the extent to which individuals focus their attention to either the positive or negative aspects can have important implications for subsequent attitudes. For instance, individuals with more positive beliefs about the inducements they will receive related to their career development could *pay more attention* to positive information the environment provides with respect to career development opportunities and less attention to negative information than those with lower promissory beliefs about career development. Second, *identical events can be interpreted differently by newcomers depending on their frame of reference toward the organization.* Individuals with higher promissory beliefs may interpret the same events more favorably than those with promissory beliefs.

Finally, the positive relationship between promissory beliefs and evaluations could be explained by the principle of ***self-fulfilling prophecy***. Our correlational data show that newcomers with strong promissory beliefs about organizational inducements also have strong beliefs about their own contributions. These correlations are reported in Appendix 8.2. It could be that these newcomers with strong promissory beliefs about what they will receive from their employer tend to contribute more to the organization and therefore receive more from their organization in return, which makes that their initial promissory beliefs are more likely to become fulfilled. We verified this assumption by successively conducting two groups of hierarchical regression analyses. In the first group we used perceptions of promises about employer inducements at T1 as independent variables and actual employee contributions at T2 as dependent variables. The results of these analyses tend to support our reasoning: employee contributions relating to flexibility, in & extra role behavior and employability were significantly affected by employees' perceptions of promises made by the organization. Subsequently we assessed the relationship between T2 employee contributions and T3 perceptions of inducements received from the organization in a second group of hierarchical regression analyses. These results show that for all types of inducements there are positive relationships between employee contributions and the perception of inducements received, supporting our proposition that employees who contribute more, also report receiving more from the organization. Thus, self-fulfilling prophecies appear to be a relevant mechanism to explain our findings about a positive association between promissory beliefs and evaluations of employer inducements.

## 8.6. Summary and Conclusions

It was the objective of this longitudinal study to obtain a better insight into the process of newcomer psychological contract development during socialization. As to date this has remained an under-researched area within the psychological contract literature. Based upon our review of theoretical and empirical evidence on psychological contract development and of socialization literature (Chapter 4), in Chapter 5 hypotheses were formulated that were related to three sub-questions on psychological contract development. These questions

addressed (1) the univariate changes in newcomers' psychological contract perceptions and evaluations and their information-seeking behaviors during the socialization process; (2) the role of adaptation and reciprocity in explaining changes in newcomers' promissory beliefs; and (3) the role of information seeking in newcomers' evaluations of their psychological contracts and of their employment relationship one year after entry. Our results were analyzed using hierarchical regression analyses (conditional change analyses) and latent growth modeling.

First, our results empirically demonstrate the dynamic nature of the psychological contract. They show that during the first year of employment, newcomers increase their perceptions of the promises they have exchanged with their employer. Regarding the evaluative facet of the psychological contract, for most dimensions of employer inducements we observed a decrease in evaluations while for most dimensions of employee contributions we observed an increase in evaluations. In line with our expectations we also observed a decrease in information seeking about inducements and contributions during the first year of employment. In general our findings suggest that changes do not occur linearly during the encounter stage and the acquisition stage of socialization.

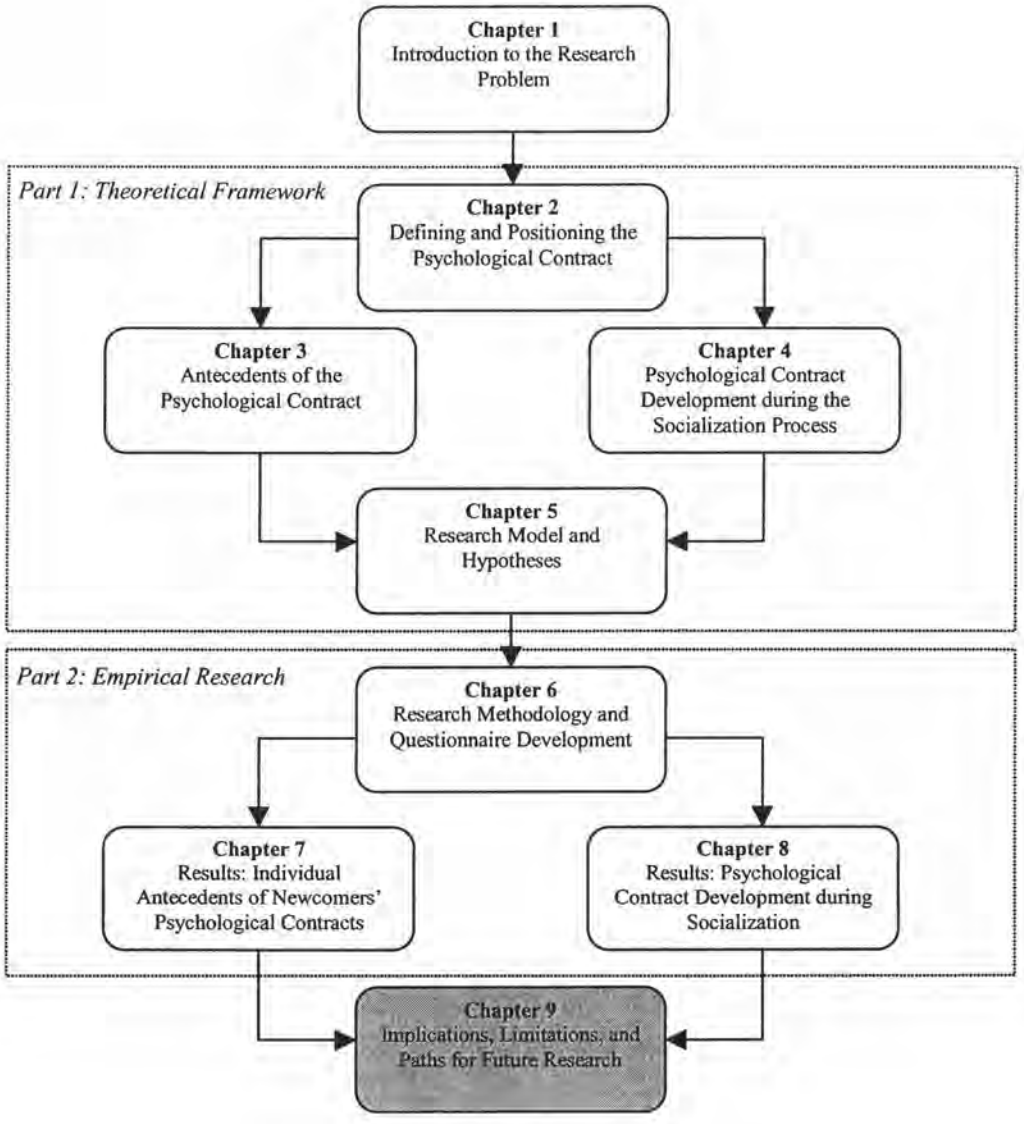
Second, to further explain the changes in newcomers' perceptions of promises exchanged with their employer we focused on two principles, namely (1) the "unilateral" principle of adapting promises to actual experiences, and (2) the principle of reciprocity between the employer and employee side of the psychological contract. In general, our results show that both principles operate in explaining changes in perceived promises during the socialization process, indicating that newcomers change their perceptions as a function of the reality as they encounter it. It also implies that it is important to take into account employees' evaluations of inducements as well as contributions when interpreting changes in their perceived promises, since both play a role in the changes occurring in newcomers' perceptions of promises over time. Moreover, we generally observed that both principles are more explicative of changes occurring during the encounter stage than during the acquisition stage. Only the adaptation of perceived employee promises to the evaluation of contributions continued equally during both stages.

Third, our results extend the evidence for the role of information seeking in newcomer adaptation to psychological contract-related information. We found a positive impact of information seeking during the initial employment period on newcomers' evaluations of promises one year after entry. These relationships were most prevalent for inducements relating to job content and social atmosphere. This suggests that information seeking about those psychological contract content areas that are most closely related to socialization content areas, is most explicative for newcomer adaptation after one year.

To sum up, our results provide us with more insights into the dynamics of psychological contract development among organizational newcomers. Overall, our findings show that several parallels can be drawn between psychological contract development and newcomer socialization and that more specifically the concept of newcomer sense making is especially relevant to create a bridge between both. Further integrating both research traditions could be fruitful in enhancing our understanding of psychological contract development as well as of the central change processes occurring during organizational socialization. Moreover, several principles central to social perception and cognition and schema development (e.g. self-fulfilling prophecy, cognitive dissonance, cognitive consistency, over-entitlements, and selective attention and interpretation of information) appear to be relevant in interpreting the subjective dynamics occurring in newcomers' psychological contracts over time.

CHAPTER STRUCTURE

# Chapter 9
# Implications, Limitations, and Paths for Future Research




*The major aim of this thesis was to theoretically explain and empirically test the individual antecedents and the development of newcomers' psychological contracts during the socialization process. In this chapter we first consider the conceptual and managerial implications of our empirical results that were presented and discussed in the previous two chapters (section 9.1). Subsequently, we describe the limitations of our study (section 9.2), followed by recommendations for future research (section 9.3). This chapter will end with some concluding remarks for the thesis as a whole (section 9.4).*

## 9.1. IMPLICATIONS

In this section we discuss the contributions this study makes to the research on psychological contracts and other research domains as well as to the management practice. In this respect we successively formulate a number of conceptual (section 9.1.1) and managerial implications (section 9.1.2).

### 9.1.1. Conceptual Implications

The results of our study have implications for the conceptualization and operationalization of the psychological contract as well as for the structural relationships of the psychological contract with other constructs and for its development over time. Considering the shortage of theory-building and research on psychological contract development, it was not our aim to develop and empirically assess one coherent model including all possible antecedent and outcome variables. Instead, the aim we formulated for this thesis was to clarify and to extend our knowledge of the origins of the psychological contract by addressing its individual antecedents and by examining the process of psychological contract development among newcomers during their socialization process. In this section the we discuss a number of implications with respect to (1) the conceptualization and measurement of the psychological contract; (2) its idiosyncratic nature; (3) the importance of the reciprocity principle; and (4) the relatedness of psychological contract development and newcomer socialization.

#### *9.1.1.1. Conceptualization and Measurement of the Psychological Contract*

As to date, there is no general agreement among psychological contract researchers about how the construct should be exactly defined and measured (e.g. Conway & Briner, 2002; Millward & Brewerton, 2000; Rousseau & Tijoriwala, 1998). This study makes four major contributions to the conceptualization and operationalization of the psychological contract: (1) its definition as a multi-faceted construct, (2) inclusion of the promissory element, (3) consideration of both parties to the relationship, (4) multidimensionality.

First, based upon an extensive review of existing measures, we have formulated theoretically sound and practically applicable definitions of the *three facets* of the psychological contract, i.e. *content, features and evaluation*, and we have made considerable efforts to generate valid and reliable measurement scales. Our results show that the content (employees' perceptions of the specific employer inducements en employee contributions being part of their employment deal) and features (the broad, general characteristics of the employment deal) of the psychological contract are two separate facets which are differentially affected by individual characteristics. Hence, researchers should be clear about this distinction in their definition and measurement of the psychological contract.

Second, we contribute to the debate on the role of the *promissory element*, central to the definition of the psychological contract, by consistently including this element in our operationalization of the construct. We have empirically shown that newcomers' promissory beliefs differ from what they merely find important and that their evaluations of promise fulfillment can be differentiated from their perceptions of actual experiences.

Third, our assessment of the psychological contract contributes to the research field by showing that it is relevant to *take into account both parties' (employer and employee) contributions*. Our results indicate that an individual's perceptions and evaluations of both parties' promises and contributions are interrelated and that they exert mutual influences upon each other.

Fourth, our results suggest that it is important to take into account *multiple dimensions of employer inducements and employee contributions comprising the psychological contract content*. This information is obtained from statistical analyses of the reliability, validity, and longitudinal measurement invariance of our scales as well as from our analyses of structural relationships. Both the influence of individual characteristics and the changes in

the psychological contract over time show different patterns depending on the content dimension of the psychological contract. This implies that it is important for future researchers to consider the psychological contract as a multidimensional rather than as a holistic, unidimensional construct.

#### *9.1.1.2. Idiosyncratic Nature of the Psychological Contract*

Researchers agree that subjectivity is a defining characteristic of psychological contracts (Rousseau & McLean Parks, 1993; Schalk & Freese, 1997). As to date, the subjectivity element has only received empirical attention in the study of outcomes of psychological contract evaluation. These studies have shown that employees' subjective perceptions of psychological contract fulfillment or breach affect their attitudes and behaviors at work (e.g. Conway & Briner, 2002; Lester *et al.*, 2002; Robinson & Morrison, 1995).
Our study has extended this research by explicitly considering the *role of subjectivity in the origins of the psychological contract.* We discern three major contributions, which relate to (1) the role of individual antecedents, (2) the subjective mechanisms underlying psychological contract changes, (3) the role of information seeking.

First, our study contributes to the understanding of the *influence of individual antecedents on the psychological contract.* Our results indicate that newcomers differ in their initial promissory beliefs as a function of what they try attain during their careers (work values), and of how they want to attain these goals (career strategy). They also indicate differences as a function of newcomers' feelings of control over their career (locus of control) and they provide evidence of the role of exchange orientation. In this way they contribute to our understanding of the psychological contract as a cognitive schema of the employment relationship (Rousseau, 1995). Moreover, they provide a concrete account of the social-cognitive theories on schemas (e.g. Fiske & Taylor, 1984; Gioa & Sims, 1986), and imply that *the psychological contract schema is not solely affected by objective information provided by the organization but also by individual characteristics.*

Second, our study contributes to the understanding of the *subjective mechanisms underlying psychological contract changes.* Our analyses of the dynamics of psychological contract development indicate that over time newcomers adapt their promissory beliefs as a function of their subjective evaluations of contract fulfillment and of their experiences within the organization. This implies that *newcomers' subjective experiences and evaluations are a relevant source of information to adapt their promissory beliefs about the terms of their employment relationship.* These findings add to the literature by extending the research on the subjective mechanisms of psychological contract changes based on samples of more senior employees to newcomers (e.g. Coyle-Shapiro & Kessler, 1998), and by using a more appropriate research design to study changes during the socialization process compared to previous studies (Robinson *et al.*, 1994; Thomas & Anderson, 1998).
Our longitudinal results also provide a concrete account of the social-cognitive theories on schema-development and show how subjective mechanisms like cognitive consistency or retrospective rationalization operate in explaining psychological contract changes during the socialization process (Fiske, 1993; Fiske & Taylor, 1984; Heath *et al.*, 1993; Salancik & Pfeffer, 1978).

Third, our finding that information seeking affects psychological contract perceptions and evaluations provides evidence for the *role of individual information-seeking strategies in psychological contract development.* It indicates that *newcomer proactivity* as an individual-level variable is relevant to understand the dynamics of newcomer psychological contract development and thus extends the findings on newcomer proactivity obtained within the socialization literature (e.g. Ashford, 1986; Bauer & Green, 1998; Morrison, 1993a; 1993b; Saks & Ashforth, 1997b).

#### *9.1.1.3. Importance of Reciprocity in the Psychological Contract*

In addition to subjectivity, exchange is a second defining characteristic of the psychological contract (Coyle-Shapiro & Kessler, 2000c; Rousseau & McLean-Parks, 1993). Existing research on psychological contracts has

addressed exchange principles in several ways: (1) by considering outcome variables (employee attitudes and behaviors) as an exchange for employees' evaluations of employer contract fulfillment (e.g. Coyle-Shapiro & Kessler, 1998; Kickul, 2001b; Robinson & Morrison, 1995); (2) by assessing the relationship between employer and employee obligations within an individual's psychological contract via cluster analyses or canonical correlation analyses (Janssens *et al.*, 2002; Rousseau, 1990; Shore & Barksdale, 1998; Van den Brande, 2002); and (3) by investigating the role of exchange ideology in psychological contracts (Coyle-Shapiro & Kessler, 1998; 2000a).
Our study contributes to the literature in two ways: (1) by further assessing the role of individual differences in exchange orientation, and (2) by investigating the reciprocity mechanism occurring in psychological contract changes.

First, our findings concerning the *impact of exchange ideology and equity sensitivity on newcomers' initial promissory beliefs* add further weight to the results obtained in previous research (Coyle-Shapiro & Kessler, 1998; 2000a). They imply that *personality explains differences in the importance of exchange norms and that this is also apparent with respect to the initial psychological contract.* This observation contributes both to the conceptualization of the psychological contract as an exchange construct and to the knowledge about individual differences in reactions to exchange situations (e.g. Eisenberger *et al.*, 1986; 2001; King & Miles, 1994; O'Neill & Mone, 1998; Witt & Wilson, 1992).

Second, we have obtained evidence for the *role of reciprocity in explaining changes in promissory beliefs during the socialization process.* In this respect we have extended the evidence on the role of reciprocity in psychological contract changes among more senior employees (Colye-Shapiro & Kessler, 1998; 2000a). In line with these previous findings, an important conclusion based on our results is that *the reciprocity mechanism does not operate to the same extent in both directions.* While newcomers change their promises about their own contributions as a function of the inducements they receive from their employer, they are less inclined to change their perceptions of employer promises as a function of the contributions they make to their employer. This implies that the reciprocity principle is more explicative of changes in newcomers' promissory beliefs about their own contributions, than for changes in their beliefs about employer inducements. We also observed that the reciprocity principle is *more prevalent during the encounter stage of socialization than during the acquisition stage*, suggesting that reciprocity might have more or less impact on changes in employees' promissory beliefs depending on the stage of their employment relationship.

#### *9.1.1.4. Relationship between Psychological Contract Development and Newcomer Socialization*

A fourth group of implications relates to the understanding of psychological contract development during the socialization process. Our study has empirically shown that the psychological contract is dynamic and that it is relevant to examine its development during organizational socialization. In this respect a major contribution made by our research is the use of a longitudinal research design and the selection of a time span and causal lags based upon socialization theories. Because of its longitudinal focus, this study provides insight into the pattern of change and stability in the psychological contract as the socialization process progresses. More specifically, we discern three important contributions, which relate to (1) the occurrence of changes during different socialization stages, (2) the processes of adaptation to reality, and (3) the role of information seeking.

First, our results demonstrate *the usefulness of taking into account different socialization stages.* They are a first empirical confirmation of the theoretical assertion that contract formation takes place most actively during the first months after entry (i.e. encounter stage), while the subsequent months (acquisition stage) are more characterized by a consolidation of perceptions (Anderson & Thomas, 1996; Nelson *et al.*, 1991; Rousseau, 1995; Shore & Tetrick, 1994). In this sense they complement the only two studies on newcomer psychological contract development available within the literature (Robinson *et al.*, 1994; Thomas & Anderson, 1998). They provide a more detailed account of changes occurring over time than it was done by Robinson *et al.* (1994) who

only used two data collections within a two-year time span and they extend the time span of four months after entry, used by Thomas & Anderson (1998).

Second, our findings show that during the first year after entry, *changes in promissory beliefs reflect a process of adaptation to reality* and that *the element of reciprocity plays an important role in this adaptation process.* The latter finding could be useful to socialization researchers. As to date social exchange and the role of reciprocity and balance have not been a focus of socialization research. A further integration of the psychological contract literature with the socialization literature will therefore add value to our understanding of the more general mechanisms of organizational socialization as well as to our knowledge of the principles of psychological contract formation.

Third, looking at newcomer adjustment as a central outcome of socialization, our results indicate that *contract-related information seeking is relevant in explaining newcomers' evaluations of their employment deal after one year.* Within the socialization literature there is extensive theoretical and empirical information on the processes leading to newcomer adjustment during the first months at work (e.g. Chan & Schmitt, 2000; Morrison, 1993a; 1993b; Ostroff & Koslowski, 1992). In our study we have applied this evidence to information seeking about the psychological contract. Our results are in line with the findings obtained within the socialization literature; both with respect to the changes occurring in information seeking during organizational socialization and with respect to the role of information seeking in newcomer adjustment. More specifically our study is the first to provide evidence for the importance of information seeking in newcomers' evaluations of contract fulfillment. Our results imply that it is important for future research to further assess the role of newcomer proactivity in relationship with the psychological contract.

### 9.1.2. Managerial Implications

Management and HR-departments often spend large amounts of time, effort and money to figure out how to retain their employees and how to keep them committed to the organization. The results of this study add empirical weight to previous researchers' propositions that *employers should be aware of employees' psychological contracts and that they should incorporate this in their human resource policies* (Cooper, 1999; Rousseau, 1995; Sparrow, 1996). In this section we describe how our findings could contribute to managing employees during the initial stages of the employment relationship in a way that should enhance mutually beneficial psychological contracts.

In general, research on retention management shows that in many cases violated psychological contracts cause employees to leave, while they often stay because of their sense of fit within the organization (Mitchell *et al.*, 2001). Enhancing these perceptions of fit by managing employees' expectations is an important task for employers, which already starts during the early stages of the employment relationship. In this respect, our results imply that *employers should not only focus on financial rewards and bonuses to retain their people but also on more subjective parts of the employment relationship.* They show that at organizational entry newcomers already have clear expectations about the inducements they will receive and these are not restricted to their job content and to financial rewards, but also to the social atmosphere at work, to their career development opportunities and to their work-life balance. Moreover, newcomers start with a clear picture of what they should contribute, not only in terms of their performance, but also with respect to their flexibility, ethical behavior, loyalty and employability. Managers as well as HR-professionals should focus their efforts on making these subjective beliefs more explicit.

First, the contemporary employment deal is becoming more and more individualistic instead of being based on collective agreements and this is reflected in the subjective nature of the psychological contract. If HR-managers are to be effective in their retention management this means that they should take into account this subjectivity

instead of departing from generally agreed-upon views on what's important to employees in general. Therefore, to enhance a positive management of the psychological contract *it is important for organizations to* ***strategically define*** *how idiosyncratic the deal with their employees can become* (Rousseau, 2001a). Depending on the strategic choices of the organization, HR-managers can be more or less flexible in working out individualized employment arrangements.

Second, ***during the recruitment phase*** organizations should *communicate clear and consistent messages to future employees.* The more stable and consistent employers are about inducements future employees can expect and contributions they should make, the more likely the chance that they develop a clear and consistent perception of their obligations and entitlements (Rousseau, 1989).
The influence of work-related individual characteristics and of more general dispositions on newcomers' initial promissory beliefs suggests that *during recruitment employers should take into account these characteristics as well as to the content dimensions of the psychological contract that future employees find important.* Employers should be aware that new hires enter the organization with promissory beliefs about what their employment relationship will entail. Leaving these personal expectations and perceptions implicit increases the risks of incongruencies between the wants and offers of employee and organization, thereby increasing the likelihood of disappointments after entry. Employers should realize that individual characteristics can only have strong influences on newcomers' promissory beliefs to the extent that the organization stays implicit about the terms of the employment deal. For example, the more implicit the organization is about career development opportunities, the greater the likelihood that an applicant will fill in this gap based upon his or her personal wishes. In contrast, explicit two-way communication about career opportunities makes it possible for both parties to assess the extent to which their respective expectations can realistically match. Therefore, *employers should pay more active attention to newcomers' initial beliefs during recruitment, by making the organizational wants and offers more explicit and by explicitly negotiating about contract terms that are central to the individual or the organization.*

Third, employers should take into account the observation that psychological contracts are subject to change ***during the initial stages of the employment relationship***. Our results suggest that managing these changes is of utmost importance during the first months after entry. This implies that during this period employers should *actively shape the psychological contract with newcomers and try to bring newcomers' promissory beliefs in line with reality.* More specifically, it stresses the *importance of establishing HR-practices focused at the socialization of newcomers.* Examples are the set up of collective induction seminars in which newcomers obtain detailed information about the organization and during which they can exchange information with peers and relevant organizational representatives. These collective practices should be complemented by *more individualized socialization tactics* such as mentoring, in order to ensure that the individualized aspects of the employment deal, negotiated during recruitment, receive further attention after entry. Negotiation and renegotiation of contract terms with the individual employee after entry may be particularly important in developing a match between what employees and employer want and offer (Herriot & Pemberton, 1996).
In this thesis we have described some of the mechanisms that can explain the changes in newcomers' psychological contract perceptions after entry, namely adjustment to reality, reciprocity, and information seeking. *Organizational agents like mentors or supervisors should take into account these mechanisms, for example by paying more attention to exchanging contract-related information and by safeguarding the commitments expressed during recruitment.* Concrete suggestions are that employers should ensure that all newcomers have a mentor with whom they can exchange information about the subjective aspects of their employment deal. Not only newcomers' mentors but also their supervisors should be clear to them about the contingencies between their contributions and the inducements they can expect.

Fourth, these efforts of employers should not be restricted to the initial stages of the employment relationship. Instead, *the management of the psychological contract should be taken into account in all other HR-practices that are focused on retaining motivated and productive employees.* Examples are career development policies and performance management systems, in which it is important for HR-managers to be clear about mutual

expectations. *Organizational agents also continue to play an important role in communicating the psychological contract after the socialization stage.* For example, for supervisors it is important to include the discussion about promissory beliefs and the extent to which they are being met in their follow-up conversations with employees and in their annual performance reviews.

We started this thesis by referring to March & Simon (1958) who, almost 55 years ago, stated that contracts are a central characteristic of employment relationships, establishing inducements and contributions that are basic to membership in an organization. Over the past 55 years, much managerial writing has counseled organizations on the importance of specifying optimal employment contracts and of establishing human resource practices that should enhance a strategic fit between organizational and individual goals. The results of this study suggest that understanding employees' *perceptions* of what this mutuality entails may be an important condition in order to realize this strategic fit. In this sense, the main message we derive from our study is that HR-managers should better take into account what their employees expect from their employment deal and how they evaluate the contributions made by both parties, if they are to contribute in a cost-efficient way to the strategic objectives of the organization.

## 9.2. LIMITATIONS

A number of limitations of the study must be noted. These relate to (1) the conceptualization and the measurement of the psychological contract, (2) the conceptual model, (3) the longitudinal research design, (4) the use of self-report measures, (5) the sample.

Conceptualization and Measurement of the Psychological Contract

First, our conceptualization of the psychological contract was based on the definition put forward by Rousseau (1995), which is also the definition that is followed by the majority of scholars in the field. However, one omission in this conceptualization is the perspective of the employer as the other party to the psychological contract. In this sense *we have only studied two sides (employees' perceptions of inducements and contributions) of a four-sided construct.*

Second, we have studied the three psychological contact facets (content, features and evaluation) and our findings demonstrate that psychological contract features are conceptually distinct from its content and evaluation. However, *we have used only one unidimensional scale to measure features.* As for the content of the psychological contract, it might be more informative to use a multidimensional measure of features.

Third, regarding the content domains we have selected to assess the content and evaluative facet of the psychological contract, *it is possible that we have excluded content elements that are more relevant to employees.* Our selection was based upon our review of the literature, discussions with practitioners in the field and pilot studies. However, it is possible that depending on the subject group, cultural differences, the economic situation or other external factors different content domains become relevant.

Conceptual Model

The fact that this study is one of the first to address the origins of the psychological contract made it almost impossible to develop a comprehensive model including all relevant antecedents. First, the array of possible individual factors is so rich that it is virtually impossible to assess the feasibility of all these factors within one study. The necessary selection we made *certainly omitted important additional variables and the pattern of findings may differ somewhat with those variables included* (e.g. personality variables like neuroticism, self-confidence, or desire for control).

Second, this omission is even more apparent if we consider *factors situated at other levels than the individual, i.e. at the organizational and societal level.* Although our results show that the individual factors we have included in our study significantly affect newcomers' initial promissory beliefs and that changes in these beliefs occurring over time are explained to a significant extent by individual-level phenomena such as information

seeking, a substantial part of the variance in promissory beliefs remains unexplained. Other factors, like cultural effects, general organizational policies and specific HR-practices, should therefore be added in order to more fully explain the psychological contract.

Research Design

A third type of limitations relates to our longitudinal research design. First, despite its many advantages, we are aware that *a longitudinal research design is not without problems such as testing effects, selection, and mortality of subjects* (Cook & Campbell, 1979; Schwab, 1999; Vondracek, 1990). For example, it is possible that over time, participants became weary of completing multiple surveys and therefore may not have been motivated to respond in a thoughtful and honest manner. Since this was a field study it was impossible to control for the situation in which respondents filled out their questionnaires and how this has been affected, for example, by communication with other respondents to the study. Throughout the study we have intensively followed up subjects' responses in order to keep subject dropout under control. The attrition rate in our study is comparable with other longitudinal research, and is good considering the number of data collections (cf. Chapter 6). Our analyses of attrition bias also suggest that attrition had no systematic effects upon the respondents' scores on the study variables or on the structural relationships found between individual antecedents and initial promissory beliefs. However, the fact that our analyses of psychological contract development throughout the socialization period are only based on those respondents who continued their participation (and, by implication, only those who stayed with the organization), restricts the generalizability of our findings.

Second, the *selection of the time span and the causal waves* also limits our findings. Although we have focused on meaningful intervals within what researchers generally consider as the socialization period, it is possible that different causal lags would show different patterns of change over time. The first measure of initial promissory beliefs at T1, i.e. four weeks after entry, also implies that we have not accounted for influences of prior-to-entry beliefs or for experiences encountered during these first weeks. This means that we have only concentrated on two of the three socialization stages considered within the socialization literature (i.e. encounter and acquisition stage), while ignoring the anticipatory socialization stage. It is important that future research takes this first stage into account.

Third, of particular interest in this study are the *problems associated with the use of one single cohort panel and the time frame within which this study took place* (Menard, 1991; Vondracek, 1990). From a more macro-perspective, several studies have shown that employees' psychological contract perceptions change as economic circumstances reduce their feelings of job security or their bargaining position at the labor market (De Meuse *et al.*, 2001; King, 2000; Roehling *et al.*, 2000). Over the past two years, i.e. during the course of our longitudinal study, *the economic situation has changed drastically and this has had implications for the organizations as well as the newcomers involved in our sample.* While we started with our study in a period of economic upheaval, by the time we collected our final data this had changed into an economic downturn. These economic changes are likely to have affected not only subject dropout but also employees' psychological contract perceptions and evaluations. For example, it is possible that our findings regarding the impact of newcomers' actual experiences and of perceived promise fulfillment on changes in promissory beliefs are caused by the fact that our respondents have been forced to redefine their perceptions of the terms of their employment relationship due to macro-economic changes rather than to socialization experiences. Therefore, to test the external validity of our results, a longitudinal design involving multiple cohorts of newcomers starting to work at different time periods is necessary (Menard, 1991; Vondracek, 1990).

Level of Analysis

Since we were interested in the assessment of individual factors affecting newcomers' psychological contracts and the in the subjective mechanisms affecting changes in psychological contracts, *we exclusively focused on the individual as the level of analysis, while ignoring possible influences of the organizational context.* Considering the fact that our sample consisted of newcomers from eight organizations, it is possible that somewhat different

patterns of relationships could have been found when taking into account the organizational level in our analyses, e.g. by controlling statistically for organizational membership or by conducting multiple-group or multilevel analyses. Additional analyses in which we controlled for organizational membership in the regression analyses and analyses conducted for each organization separately suggest that the organizational level did not systematically distort the patterns of relationships we have found. However, is important for future research to explicitly model the organizational level.

Self-Report Measures

A fourth group of limitations concerns the use of self-report measures. Because we were primarily interested in newcomers' perceptions and subjective evaluations of their employment relationship, the use of self-report data is justified (Crampton & Wagner, 1994). As discussed, this was felt to be the best method for assessing psychological contracts (Conway & Briner, 2002; Rousseau & Tijoriwala, 1998). However, this justification does not eliminate the potential problems of common method variance due to single-source bias and of socially desirable responding (Crampton & Wagner, 1994).

First, *common method variance may have inflated the magnitude of the relationships among self-report measures.* Although the likelihood of common method bias was somewhat reduced by measuring independent and dependent variables at different points in time and by focusing only on the change portion of psychological contract measures (Cohen & Cohen, 1983), future research should supplement self-reports with data from supervisors, peers, or both.

Second, *respondents may have failed to report their behaviors and attitudes accurately or they may have been concerned to maintain consistency in their survey responses.* The fact that the questionnaires had to be pre-coded in order to relate subjects' answers to the five questionnaires can also have affected their responses. We hope that our instructions to report accurately, our assurances of confidentiality, and our detailed explanations of the research purpose have reduced these possible self-report biases.

Sample

The sample involved in our study also sets limitations to the generalizability of our findings. This study has not been conducted on a representative sample of employees and this should be taken into account when interpreting our results. First, *our sample only included newcomers from eight large profit firms.* The HR-practices within these large organizations may differ significantly from HR-practices in small and medium sized organizations and in organizations belonging to different sectors (e.g. non-profit organizations). Given the importance of organizational context in the psychological contract these differences will probably contribute to differences in newcomer psychological contract development. Second, *respondents within these organizations were comparable in that they had a higher education profile and they were all hired for clerical or white-collar jobs.* It is possible that other results may be obtained when focusing on different hierarchical levels. Careful cross-validation of findings is therefore important to assess whether the relationships we have found also hold within different research populations.

## 9.3. Suggestions for Future Research

The limitations mentioned in the previous section suggest interesting avenues for future research. These include (1) the assessment of other antecedents; (2) the use of different time spans and causal lags; (3) the inclusion of the organizational perspective upon the psychological contract, and (4) a further investigation of the role of information seeking.

First, prior research has tended to focus exclusively on the aftermath of psychological contract formation, with this being one of the first studies to address its formation. In the previous section we have indicated that a limitation of our study is its focus on individual antecedents and the fact that these individual-level factors do not account for all the variance in newcomers' psychological contracts. Therefore it is important for future research

to *extend our framework of antecedent variables and to empirically assess the role of organizational factors* like human resource policies (e.g. career development systems or reward systems) and the communication about these policies to employees. Van den Brande (2002) recently concluded that individual factors explain more variance in employees' psychological contracts than human resource practices. However, other studies suggest that human resource factors do play a role in the psychological contract (e.g. Guest & Conway, 2002; Stiles *et al.*, 1997). With respect to newcomers, *applying the information on the role of organizational antecedents obtained within socialization research* (e.g. Ashforth & Saks, 1996; Cable & Parsons, 2001; Riordan *et al.*, 2001) to psychological contract development is a fruitful path for future research. When studying these factors, the use of more objective measures in addition to employees' perceptions of human resources practices is important. Also the role of organizational agents like newcomers' supervisor, mentor and peers needs further empirical attention. Moreover, because the psychological contract is proposed to change as a function of the interaction between the individual and the organization, it is important for future research to assess the *interaction between organizational and individual factors*, instead of only focusing on the main effects of both groups of antecedents.

Second, another interesting area of future research would be to investigate how employees' psychological contracts continue to *change after their first year within the organization* and to further assess the similarities and differences in patterns of change across individuals over the course of their careers. For example, we would expect perceptions to change less rapidly after the first year of employment as employees become better able to anticipate and predict employers' actions and responses. Also the reciprocity principle appears to operate differently depending on the stage of the employment relationship. Therefore, cohorts of organizational newcomers could be followed over a longer time period, or different cohorts of employees (with different seniority) could be studied and compared within an organization.
Changes in psychological contracts may also occur differently depending on the career stage of employees. To capture *psychological contract development throughout the course of individuals' careers*, more qualitative research in which a restricted sample of individuals is followed during their whole career is needed. The qualitative research on career development conducted by Schein (1965; 1978) several years ago is an interesting example in this respect. This type of research would provide more information about how employees' psychological contracts change and how sense making about a new employment relationship differs as a function of the work experiences employees can rely upon.
Considering the first year of employment, it is important for future research to further focus on the *temporal aspects of socialization and to incorporate the anticipatory socialization stage*. Our results suggest that different change processes occur during the encounter stage compared to the acquisition stage of socialization. In order to understand these differences more fully, future research could focus on one of these stages and assess more subtle changes occurring over shorter time periods using different causal lags of other research methodologies like diary studies (Conway & Briner, 2000; 2002). It is also important for future research to take into account the anticipatory socialization stage and to assess newcomers' psychological contract perceptions before they actually enter the employment relationship.

Third, in our study we assessed employees' perceptions and evaluations of both the employer and the employee side of the psychological contract. We already mentioned that it is a limitation of this study to exclude a formal assessment of the organizational perspective on employer inducements and employee contributions (Coyle-Shapiro & Kessler, 2000c; Guest & Conway, 2002). *Having the organization report on the psychological contract* not only provides the opportunity to compare both parties' views regarding their own and on the other party's promises and the fulfillment of these promises. It also adds to the use of single-source data because having an organizational agent reporting on employees' contributions makes it possible to overcome the problems inherent in using only single-source data.

Fourth, the perceptual nature of the psychological contract and its conceptualization in terms of a cognitive schema about the employment relationship made it especially relevant to relate our research on its formation to

the socialization research on newcomer sense making and information seeking. Our results provide a first empirical account of the role of newcomer proactivity in their psychological contract perceptions and evaluations. This is not only important in extending our knowledge on psychological contracts but it also suggests that it is important to make a closer integration of psychological contract and socialization literature. The basic theoretical perspectives that are important in both research traditions, and which we have discussed in this thesis, can be relevant to build bridges between both. In this respect, future research could for instance *examine the role of contract-related information seeking in comparison with information seeking about socialization domains like task mastery and acculturation.* As suggested by our findings in Chapter 8, information seeking about those psychological contract dimensions that are most closely related to socialization domains (job content and social atmosphere), is most predictive of newcomers' evaluations of their psychological contract as well as of their general adjustment. Further research is needed to clarify this relationship and to address the distinctive nature of what newcomers need to learn about the job and the organization in order to become proficient organizational members (i.e. the central aim of socialization) from the more general knowledge about the employment deal necessary in order to develop a mutually-shared and realistic understanding (i.e. the central focus of psychological contracts).
Future research could also address *different types of newcomer proactivity, such as networking behavior and self-management.*

## 9.4. Conclusion

In conclusion, the results of our study confirm that the psychological contract is an idiosyncratic construct that is dynamic and evolving over time. Our study provides evidence that the personal characteristics and experiences individuals bring to their new organization and the experiences they encounter during the initial stages of the employment relationship shape their subsequent perceptions and evaluations of their employment relationship and that this, in turn, affects their adjustment to the organization. We consider these findings as a challenge for researchers to further explore the psychological contract as a concept useful to extend our knowledge about how newcomers make sense of their employment relationship.

# References

## A


Adams, J. S. (1965). Inequity and social exchange. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 2, pp. 267-299). New York: Academic Press.

Allen, N. A., & Meyer, J. P. (1990). Organizational socialization tactics: A longitudinal analysis of links to newcomers' commitment and role orientation. *Academy of Management Journal, 33*(4), 847-858.

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin, 103,* 411-423.

Anderson, N., & Ostroff, C. (1997). Selection as socialization. In N. Anderson & P. Herriot (Eds.), *International handbook of selection and assessment* (pp. 413-440). Chichester: John Wiley & Sons.

Anderson, N., & Schalk, R. (1998). The psychological contract in retrospect and prospect. *Journal of Organizational Behavior, 19,* 637-647.

Anderson, N., & Thomas, H. D. C. (1996). Work group socialization. In M. A. West (Ed.), *Handbook of Work Groups* (423-450). Chichester: John Wiley & Sons.

Aquino, K., Griffeth, R. A., Allen, D. G., & Hom, P. W. (1997). Integrating justice constructs into the turnover process : A test of a referent cognitions model. *Academy of Management Journal, 40,* 1020-1227.

Arbuckle, J. L. (1996). Full information estimation in the presence of incomplete data. In G. A. Marcoulides & R.E. Schumacker (Eds.), *Advanced structural equation modeling: Issues and techniques.* Mahwah, NJ : Lawrence Erlbaum Associates.

Argyris, C. (1960). *Understanding organisational behaviour.* Homewood : Dorsey Press.

Arnold, J. (1996). The psychological contract: A concept in need of closer scrutiny ? *European Journal of Work and Organizational Psychology, 15,* 511-520.

Arthur, M. B., Hall, D. T., & Lawrence, B. S. (1989). *Handbook of career theory.* Cambridge: Cambridge University Press.

Arthur, M. B., Inkson, K. I., & Pringle, J. K. (1999). *The new careers. Individual action & economic change.* London: Sage.

Arthur, M. B., & Kram, K. E. (1989). Reciprocity at work: The separable, yet inseparable possibilities for individual and organizational development. In M. B. Arthur, D. T. Hall & B. S. Lawrence (Eds.), *Handbook of career theory* (pp. 292-312). Cambridge: Cambridge University Press.

Ashford, S. J. (1986). Feedback-seeking in individual adaptation: A resource perspective. *Academy of Management Journal, 29,* 465-487.

Ashford, S. J., & Black, J. S. (1996). Proactivity during organizational entry: The role of desire for control. *Journal of Applied Psychology, 81*(2), 199-214.

Ashford, S. J., & Cummings, L. L. (1983). Feedback as an individual resource: Personal strategies of creating information. *Organizational Behavior and Human Performance, 32,* 1017-1028.

Ashford, S. J., & Cummings, L. L. (1985). Proactive feedback seeking: The instrumental use of the information environment. *Journal of Occupational Psychology, 58,* 67-79.

Ashforth, B. E., & Saks, A. M. (1996). Socialization tactics: Longitudinal effects on newcomer adjustment. *Academy of Management Journal, 39*(1), 149-178.

## B

Bagozzi, R. P., & Edwards, J. R. (1998). A general approach for representing constructs in organizational research. *Organizational Research Methods, 1*, 45-87.

Baltes, P. B., & Nesselroade, J. R., (1979). History and rationale of longitudinal research. In J. R. Nesselroade & P. B. Baltes (Eds.), *Longitudinal research in the study of behavior and development* (pp. 1-39). New York: Academic Press.

Barney, J. B., & Lawrence, B. S. (1989). Pin stripes, power ties, and personal relationships: The economics of career strategy. In M. B. Arthur, D. T. Hall, & B. S. Lawrence (Eds), *Handbook of career theory* (pp. 417-436). Cambridge : Cambridge University Press.

Bartlett, F. C. (1932). *Remembering: A study in experimental and social psychology.* Cambridge: Cambridge University Press.

Baruch, Y. (1999). Response rate in academic studies: A comparative analysis. *Human Relations, 52*(4), 421-438.

Bauer, T. N., & Green, S. G. (1998). Testing the combined effects of newcomer information seeking and manager behavior on socialization. *Journal of Applied Psychology, 83*(1), 72-83.

Bauer, T. N., Morrison, E., & Callister, R. (1998). Organizational socialization : A review and directions for future research. In G. R. Ferris (Ed.), *Research in personnel and human resources management* (Vol. 16, pp.149-214). Stamford, CO : JAI Press.

Bedeian, A, Kemery, E., & Pizzolatto, A. (1991). Career commitment and expected utility of present job as predictors of turnover intentions and turnover behavior. *Journal of Vocational Behavior, 39,* 331-343.

Beehr, T. A. , & Juntunen, D. L. (1990). Promotions and employees' perceived mobility channels: The effects of sex, employee group, and initial placement. *Human Relations, 43,* 455-472.

Beehr, T. A., Taber, T. D., Walsh, J. T. (1980). Perceived mobility channels: Criteria for intraorganizational job mobility. *Organizational Behavior and Human Performance, 26,* 250-264.

Beehr, T. A., & Taber, T. D. (1993). Perceived intra-organisational mobility: Reliable versus exceptional performance as means to getting ahead. *Journal of Organizational Behavior, 14,* 579-594.

Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin, 107*(2), 238)246.

Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin, 88,* 588-606.

Bing, M. N., & Burroughs, S. M. (2001). The predictive and interactive effects of equity sensitivity in teamwork-oriented organizations. *Journal of Organizational Behavior, 22,* 271-290.

Black, S. J., & Ashford, S. J. (1995). Fitting in or making jobs fit: Factors affecting mode of adjustment. *Human Relations, 48*(4), 421

Blader, S., & Tyler, T. (2000). Beyond reciprocity: The role of relationship orientation in explaining cooperative organizational behavior. *Paper presented at the 15th annual conference of the Society of Industrial and Organizational Psychology,* New Orleans, Louisiana, April 14-16.

Blakely, G. L., Andrews, M. C., & Moorman, R. H. (2001). The moderating effects of equity sensitivity on the relationship between organizational justice and organizational citizenship behaviors. *Paper presented at the annual meeting of the Academy of Management,* Washinton, D. C., August 6 – 8.

Blancero, D. M., & Kreiner, G. E. (2000). The anticipatory psychological contract: Employer/Employee Obligations and Job Choice. *Paper presented at the annual meeting of the Academy of Management*, Toronto, August 2000.

Blau, G. J. (1985). The measurement and prediction of career commitment. *Journal of Occupational Psychology, 58,* 277-288.

Blau, G. J. (1993). Testing the relationship of locus of control to different performance dimensions. *Journal of Occupational and Organizational Psychology, 66,* 125-138.

Blau, P. M. (1964). *Exchange and Power in Social Life.* New York: John Wiley & Sons.

Bollen, K. A. (1989). *Structural equations with latent variables.* New York: John Wiley & Sons.

Bretz, R. D., & Judge, T. A. (1994). Person-organization fit and the theory of work adjustment: Implications for satisfaction, tenure and career success. *Journal of Vocational Behavior, 44,* 32-54.

Buckley, M. R., Fredor, D. B., Veres, J. G., Wiese, D. S., & Carraher, S. M. (1998). Investigating newcomer expectations and job-related outcomes. *Journal of Applied Psychology, 83*(3), 452-461.

Burr, J. A., & Nesselroade, J. R. (1990). Change measurement. In A. von Eye (Ed.), *Statistical methods in longitudinal research* (Vol. 1, pp. 3-34). Boston: Academic Press.

Butler, J. K., Jr. (1983). Value importance as a moderator of the value fulfillment-job satisfaction relationship : Group differences. *Journal of Applied Psychology, 68*(3), 420-428.

Butler, G., & Vodanovich, S. J. (1992). The relationship between work values and normative and instrumental commitment. *The Journal of Psychology, 126*(2), 139-146.

Buyens, D. (1993). *Career development and adult life cycle transitions : Antecedents and consequences of (mid-) career transitions.* Non-published doctoral dissertation, Gent: University of Gent.

Buyens, D., Martens, G., Meganck, A., Wouters, K. & De Vos, A. (2002). De relatie en interactie tussen loopbaanactiviteiten en werknemerspercepties inzake loopbaanontwikkeling als onderdeel van het psychologisch contract: Literatuurstudie en empirisch onderzoek. *Wetenschappelijk onderzoeksverslag opgesteld in het kader van het F.W.O. project nr. G.0106.00,* Gent: Universiteit Gent.

Byrne, B. M. (2001). *Structural equation modeling with AMOS. Basic concepts, applications, and programming.* Mahwah (NJ): Erlbaum.

Byrne, B. M.,, Shavelson, R. J., & Muthén, B. (1989). Testing for the equivalence of factor covariance and mean structures: The issue of partial invariance. *Psychological Bulletin, 105,* 456-466.

## C

Cable, D. M., & Parsons, C. K. (2001). Socialization tactics and person-organization fit. *Personnel Psychology, 54*(1), 1-24.

Campion, M. A., Cheraskin, L., & Stevens, M. J. (1994). Career-related antecedents and outcomes of job rotation. *Academy of Management Journal, 37* (6), 1518-1542.

Cappelli, P. (2000). A market-driven approach to retaining talent; *Harvard Business Review*, January-February, 103-111.

Cassar, V. (2001). Violating psychological contract terms amongst Maltese public service employees : Occurrence and relationships. *Journal of Managerial Issues, 16*(3), 194-208.

Catrambone, R., & Markus, H. (1987). The role of self-schemas in going beyond the information given. *Social Cognition, 5*(4), 349-368.

Chan, D. (1998). The conceptualization and analysis of change over time: An integrative approach incorporating longitudinal means and covariance structures analysis (LMACS) and multiple indicator latent growth modeling (MLGM). *Organizational Research Methods, 1,* 421-483.

Chan, D., & Schmitt, N. (2000). Interindividual differences in intraindividual changes in proactivity during organizational entry: A latent growth modeling approach to understanding newcomer adaptation. *Journal of Applied Psychology, 85*(2), 190-210.

Chang, E. (1999). Career commitment as a complex moderator of organizational commitment and turnover intention. *Human Relations, 52*(10), 1257-1278.

Chao, G. T., O'Leary-Kelly, A. M., Wolf, S., Klein, H. J., & Gardner, P. D. (1994). Organizational socialization : Its content and consequences. *Journal of Applied Psychology, 79*(5), 730-743.

Chatman, J. A. (1991). Matching people and organizations: Selection and socialization in public accounting firms. *Administrative Science Quarterly, 36,* 459-484.

Cherniss, C. (1991). Career commitment in human service professionals: A biographical study. *Human Relations, 44*(5), 419-437.

Cheung, G. W., & Rensvold, R. B. (1999). Testing factorial invariance across groups: A reconceptualization and proposed new method. *Journal of Management, 25,* 1-27.

Clark, M. S., & Mills, J. (1979). Interpersonal attraction in exchange and communal relationships. *Journal of Personality and Social Psychology, 37,* 12-24.

Coetsier, P., & Claes, R. (1990). *Belang van levensrollen en waarden* [Importance of life roles and values]. In: Reeks Theoretische en Toegepaste Psychologie, n° 3, Oostende : Infoservice.

Cohen, J., & Cohen, P. (1983). *Applied multiple regression/correlation analysis for the behavioral science* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.

Coleman, D. F., Irving, G. F., & Cooper, C. L. (1999). Another look at the locus of control – organizational commitment relationship: It depends on the form of commitment. *Journal of Organizational Behavior, 20,* 995-1001.

Conway, N. (1999). *Using the psychological contract to explain attitudinal and behavioural differences between full-time and part-time employees.* Non-published doctoral dissertation, London: University of London.

Conway, N., & Briner, R. (2000). A daily diary study of affective and behavioral responses to psychological contract violation and exceeded promises. *Paper presented at the 15th Annual Conference of the Society for Industrial and Organizational Psychology,* New Orleans, LO, April 14-16.

Conway, N., & Briner, R. (2002). A daily diary study of affective responses to psychological contract breach and exceeded promises. *Journal of Organizational Behavior, 23,* 287-302.

Cook, T. D., & Campbell, D. T. (1979). *Quasi-experimentation: Design and analysis for the behavioral sciences.* Boston : Houghton Mifflin.

Cook, J., & Wall, T. (1980). New work attitudes measures of trust, organizational commitment and personel need non-fulfillment. *Journal of Occupational Psychology, 53,* 39-52.

Cooper, C. L. (1999). The changing psychological contract at work. *European Business Journal, 11*(3), 115-118.

Cornwall, J. R., & Grimes, A. J. (1987). Cosmopolitan-local: A cross-lagged correlation analysis of the relationship between professional role orientations and behaviors in an academic organization. *Human Relations, 40,* 281-298.

Coyle-Shapiro, J. A-M. (2000). Psychological contracts: What are the measurement trade-offs and are they worth it ? *Paper presented at the annual meeting of the Academy of Management,* Toronto, August 2000.

Coyle-Shapiro, J. A-M. (2001a). Managers: Caught in the middle of a psychological contract muddle. *Paper presented at the annual meeting of the Academy of Management*, Washington, D. C., August 2001.

Coyle-Shapiro, J. A-M. (2001b). Psychological contracts and perceived organizational support: What is their relationship? *Paper presented at the annual meeting of the Academy of Management*, Washington, D. C., August 2001.

Coyle-Shapiro, J. A-M., & Kessler, I. (1998). The psychological contract in the UK public sector : Employer and employee obligations and contract fulfillment. *Academy of Management Proceedings*, August, San Diego.

Coyle-Shapiro, J. A-M., & Kessler, I. (2000a). Exploring employee reciprocity through the lens of the psychological contract. *Paper presented at the 15th annual conference of the Society of Industrial and Organizational Psychology*, New Orleans, Louisiana, April 14-16.

Coyle-Shapiro, J. A-M., & Kessler, I. (2000b). Mutuality, stability and psychological contract breach : A longitudinal study. *Paper presented at the annual meeting of the Academy of Management*, Toronto, Canada, August 2000.

Coyle-Shapiro, J. A-M., & Kessler, I. (2000c). Consequences of the psychological contract for the employment relationship : A large-scale study. *Journal of Management Studies, 37*(7), 903-930.

Coyle-Shapiro, J. A-M., & Kessler, I. (2002). Contingent and non-contingent working in local government : Contrasting psychological contracts. *Public Administration. An International Quarterly, 80*(1), 77-101.

Crampton, S. M., & Wagner, J. A. (1994). Percept-percept inflation in micro-organizational research : An investigation of prevalence and effect. *Journal of Applied Psychology, 79*, 67-76.

Cronbach, L. J., & Furby, L. (1970). How should we measure « change » – or should we? *Psychological bulletin, 74*, 68-80.

Curran, P. J. (2000). A latent curve framework for studying developmental trajectories of adolescent substance use. In J. Rose, L. Chassin, C. Presson, & J. Sherman (Eds.), *Multivariate applications in substance use research*, (pp. 1-42). Hillsdale, NJ: Erlbaum.

Curran, P. J., & Bollen, K. A. (2001). The best of both worlds. Combining autoregressive and latent curve models. In L. M. Collins & A. G. Sayer (Eds.), *New methods for the analysis of change*, (pp. 105-136). Washington, DC: American Psychological Association.

Curran, P. J., & Hussong, A. M. (2002). Structural equation modeling of repeated measures data: Latent curve analysis. In D. Moskowitz & S. Hershberger (Eds.), *Modeling intraindividual variability with repeated measures data: Methods and applications*, (pp. 59-86). New York: Erlbaum Associates.

Curran, P. J., & Muthén, B. O. (1999). The application of latent curve analysis to testing developmental theories in intervention research. *American Journal of Community Psychology, 27*(4), 567-595.

## D

Dawis, R. V. (1991). Vocational interests, values, and preferences. In M. D. Dunnette & L. Hough (Eds.), *Handbook of industrial and organizational psychology* (2nd ed., vol.2, pp. 833-872). Palo Alto (CA): Consulting Psychologists Press.

Dawis, R. V. (1994). The theory of work adjustment as convergent theory. In M. L. Savikas & R. W. Lent (Eds), *Convergence in career development theories. Implications for science and practice* (pp. 33-44). Palo Alto (CA): Consulting Psychologists Press.

Dawis, R. V., & Lofquist, L. (1984). *A psychological theory of work adjustment.* Minneapolis: University of Mineapolis Press.

De Meuse, K. P., Bergmann, T. J., & Lester, S. W. (2001). An investigation of the relational component of the psychological contract across time, generation and employment status. *Journal of Managerial Issues, 13*(1), 102-118.

Derr, C. B., & Laurent, A. (1989). The internal and external career: A theoretical and cross-cultural perspective. In M. B. Arthur, D. T. Hall & B. S. Lawrence (Eds.), *Handbook of career theory* (pp. 454-471). Cambridge: Cambridge University Press.

Dopson, S., & Neumann, J. E. (1998). Uncertainty, contrariness and the double-bind: Middle managers' reactions to changing contracts. *British Journal of Management, 9*, S53-S70.

Dose, J. J. (1997). Work values: An integrative framework and illustrative application to organizational socialization. *Journal of Occupational and Organizational Psychology, 70*(3), 219-240.

Driver, M. J. (1994). Careers: A review of personal and organizational research. In C. L. Cooper & I .T. Robertson (Eds.), *Key reviews in managerial psychology. Concepts and research practice* (pp. 237-269). Chichester: John Wiley & Sons.

Dugoni, B. L., & Ilgen, D. R. (1981). Realistic job previews and the adjustment of new employees. *Academy of Management Journal, 24*, 579-591.

Duncan, S. C., Duncan, T. E., Strycker, L. A., Li, F., & Alpert, A. (1999). *An introduction to latent variable growth curve modeling. Concepts, issues and applications.* Mahwah, NJ: Lawrence Erlbaum.

## E

Edwards, J. R. (1991). Person-job fit : A conceptual integration, literature review, and methodological critique. In C. L. Cooper & I. T. Robertson, *International review of industrial and organizational psychology* (pp. 283-357). Chichester: John Wiley & Sons.

Edwards, J. R. (1994a). The study of congruence in organizational behavior research : Critique and a proposed alternative. *Organizational Behavior and Human Decision Processes, 58*, 51-100 (erratum, 58 : 323-325).

Edwards, J. R. (1994b). Regression analysis as an alternative to difference scores. *Journal of Management, 20*, 683-689.

Eisenberger, R., Armeli, S., Rexwinkel, B., Lynch, P. D., & Rhoades, L. (2001). Reciprocation of perceived organizational support. *Journal of Applied Psychology, 86*(1), 42-51.

Eisenberger, R., Fasolo, P., & Davis-LaMastro, V. (1990). Perceived organizational support and employee diligence, commitment, and innovation. *Journal of Applied Psychology, 75*, 51-59.

Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology, 71*, 500-507.

Elizur, D., Borg, I., Hunt, R., & Beck, I . M. (1991). The structure of work values: A cross cultural comparison. *Journal of Organizational Behavior, 12*, 21-38.

Elizur, D., & Sagie, A. (1999). Facets of personal values: A structural analysis of life and work. *Applied Psychology : An International Review, 48*(1), 73-87.

Enders, C. K. (2001). The performance of the full information maximum likelihood estimator in multiple regression models with incomplete data. *Educational and Psychological Measurement, 61*(5), 713-740.

Enders, C. K., & Bandalos, D. L. (2001). The relative performance of full information maximum likelihood estimation for missing data in structural equation models. *Structural Equation Modeling, 8*(3), 430-457.

Engle, E. M., & Lord, R. G. (1997). Implicit theories, self-schemas, and leader-member exchange. *Academy of Management Journal, 40*(4), 988-1010.

## F

Farnsworth, E. (1982). *Contracts.* Boston: Little, Brown.

Feldman, D. C. (1976). A contingency theory on socialization. *Administrative Science Quarterly, 21,* 433-452.

Feldman, D. C. (1981). The multiple socialization of organization members. *Academy of Management Review, 6,* 309-318.

Festinger, L. (1954). A theory of social comparison. *Human Relations, 7,* 117-140.

Finegan, J. E. (2000). The impact of person and organizational values on organizational commitment. *Journal of Occupational and Organizational Psychology, 73*(2), 149-169.

Finkel, S. E. (1995). *Causal analysis with panel data.* Thousand Oaks, CA: Sage Publications.

Fisher, C. D. (1986). Organizational socialization: An integrative review. In G. R. Ferris & K. M. Rowland (Eds.), *Research in personnel and human resource management* (Vol. 4, pp. 101-145). Greenwich, CT : JAI Press.

Fiske, S. T. (1992). Thinking is for doing: Portraits of social cognition from daguerreotype to laserphoto. *Journal of Personality and Social Psychology, 63,* 877-889.

Fiske, S. T. (1993). Social cognition and social perception. *Annual Review of Psychology, 44,* 155-194.

Fiske, S. T., & Neuberg, S. L. (1990). A continuum of impression formation, from category-based to individuating processes : influences of information and motivation on attention and interpretation. In M. P. Zanna (Ed.), *Advances in Experimental Social Psychology* (Vol. 23, pp. 1-74). San Diego : Academic Press.

Fiske, S. T., & Taylor, S. E. (1984). *Social Cognition.* Reading : Addison-Wesley.

Fletcher, C., & Williams, R. (1996). Performance management, job satisfaction and organizational commitment. *British Journal of Management, 7,* 169-179.

Fornell, C., & Larcker, F. D. (1981). Evaluating structural equation models with unobservable variables and measurement errors. *Journal of Marketing Research, 18,* 39-50.

Freese, C., & Schalk, R. (1996). Implications of differences in psychological contracts for human resource management. *European Journal of Work and Organizational Psychology, 5(4),* 501-509.

Freese, C., & Schalk, R. (1997). Closing a new deal : Big deal! *Paper presented at the Eight European Congress on Work and Organizational Psychology, EAWOP,* April 1997, Verona-Bussolengo, Italy.

Freese, C., & Schalk, R. (1999). Organisational change and the dynamics of the psychological contract. *Paper presented at the Ninth European Congress on Work and Organizational Psychology, EAWOP,* May 1999, Espoo, Finland.

Freese, C., Heinen, J., & Schalk, R. (1999). Organisatieverandering en het psychologisch contract, betrokkenheid en intentie tot verloop bij werknemers in de thuiszorg. *Tijdschrift voor Arbeidsvraagstukken, 15*(3), 208-218.

Furnham, A., & Steele, H. (1993). Measuring locus of control : A critique of general, children's, health,- and work-related locus of control questionnaires. *British Journal of Psychology, 84,* 443-479.

# G

Gerstner, C. R., & Day, D. V. (1997). Meta-analytic review of leader-member exchange theory: correlates and construct issues. *Journal of Applied Psychology, 82*(6), 827-844.

Geurts, S. A., Schaufeli, W. B., & Rutte, C. G. (1999). Absenteeism, turnover intention and inequity in the employment relationship. *Work & Stress, 13*(3), 253-267.

Gioia, D. A., & Sims, Jr., H. P. (1986). Introduction: Social cognition in organizations. In H. P. Sims, Jr. & D. A. Gioia (Eds.), *The thinking organization* (pp. 1-19). San Francisco: Jossey-Bass.

Goldsmith, A. H., Veum, J. R., & Darity, W., Jr. (2000). Working hard for the money? Efficiency wages and worker effort. *Journal of Economic Psychology, 21,* 351-385.

Goodman, P. S. (1974). An examination of referents used in evaluations of pay. *Organizational Behavior and Human Performance, 12,* 170-195.

Gouldner, A. W. (1957). Cosmopolitans and locals: Toward an analysis of latent social roles – I. *Administrative Science Quarterly, 2,* 281-306.

Gouldner, A. W. (1958). Cosmopolitans and locals: Toward an analysis of latent social roles – II. *Administrative Science Quarterly, 2,* 444-480.

Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review, 25,* 161-178.

Grant, D. (1999). HRM, rhetoric and the psychological contract: A case of 'easier said than done'. *International Journal of Human Resource Management, 10*(2), 327-350.

Greenhaus, J. H., Seidel, C., & Marinis, M. (1983). The impact of expectations and values on job attitudes. *Organizational Behavior and Human Performance, 31,* 394-417.

Greenwald, A. G. (1980). The totalitarian ego: Fabrication and revision of personal history. *American Psychologist, 35,* 603-618.

Guest, D. (1998a). Is the psychological contract worth taking seriously? *Journal of Organizational Behavior, 19,* 649-664.

Guest, D. (1998b). On meaning, metaphor and the psychological contract: a response to Rousseau (1998). *Journal of Organizational Behavior, 19,* 673-677.

Guest, D., & Conway, N. (1997). *Employee motivation and the psychological contract* (Issues in People Management No. 21). London: Institute of Personnel and Development.

Guest, D., & Conway, N. (1998). *Fairness at work and the psychological contract* (Issues in People Management). London: Institute of Personnel and Development.

Guest, D., & Conway, N. (2000). Can an organization have a psychological contract? A conceptual and empirical analysis. *Paper presented at the Academy of Management Conference,* August 7-10, Toronto.

Guest, D., & Conway, N. (2002). Communicating the psychological contract: An employer perspective. *Human Resource Management Journal, 12*(2), 22-38.

Guest, D., Conway, N., Briner, R., & Dickman, M. (1996). *The state of the psychological contract in employment.* (Issues in People Management, No. 16). London: Institute of Personnel and Development.

Guest, D., Mackenzie Davey, K., & Patch, A. (1998). Employment contracts, psychological contracts and innovative behaviour: A conceptual model and empirical test. *Paper presented at the 24th International Congress of Applied Psychology,* August, San Francisco.

Guest, D., Mackenzie Davey, K., & Patch, A. (1999). Flexible employment contracts, innovation and learning. *Paper presented at the International Congress on Competence For Europe,* April 21-23, Berlin.

Guzzo, R. A., & Noonan, K. A. (1994). Human resource practices as administrative contract makers. *Human Resource Management, 33*, 44-72.

Guzzo, R. A., Noonan, K. A., & Elron, E. (1994). Expatriate managers and the psychological contract. *Journal of Applied Psychology, 79*(4), 617-626.

## H

Hahn, S. E. (2000). The effects of locus of control and daily exposure, coping and reactivity to work interpersonal stressors : A diary study. *Personality and Individual Differences, 29,* 729-748.

Hall, D. T. (Ed.) (1986). *Career development in organizations.* San Francisco, CA: Jossey-Bass.

Hall, D. T., Briscoe, J. P., & Kram, K. E. (1997). Identity, values and learning in the protean career. In C. L. Cooper & S. E. Jackson (Eds.), *Creating Tomorrow's Organisations* (pp. 321-335). Chichester: John Wiley & Sons.

Hall, D. T., & Foster, L. W. (1977). A psychological success cycle and goal setting: Goals, performance, and attitudes. *Academy of Management Journal, 20,* 282-290.

Hall, D. T., & Mirvis, P. H. (1995). Careers as lifelong learning. In A. Howard (Ed.), *The changing nature of work* (pp. 323-361). San Francisco, CA: Jossey Bass.

Hall, D. T., & Moss, J. E. (1998). The new protean career contract: Helping organizations and employees adapt. *Organisational Dynamics, 26*(3), 22-37.

Hallier, J., & James, P. (1997). Middle managers and the employee psychological contract: Agency, protection and advancement. *Journal of Management Studies, 34*(5), 703-728.

Heath, C., Knez, M., & Camerer, C. (1993). The strategic management of the entitlement process in the employment relationship. *Strategic Management Journal, 14*, 75-93.

Herriot, P. (1992). *The Career Management Challenge.* London: Sage.

Herriot, P. (1998). The role of the HRM function in building a new proposition for staff. In P. Sparrow & M. Marchington (Eds.), *Human Resource Management: The New Agenda.* London: Financial Times and Pitman.

Herriot, P., Hirsch, W., & Reilly, P. (1998). *Trust and Transitions: Managing Today's Employment Relationship.* Chichester : John Wiley & Sons.

Herriot, P., Manning, W. E. G., & Kidd, J. M. (1997). The content of the psychological contract. *British Journal of Management, 8*, 151-162.

Herriot, P., & Pemberton, C. (1995a). A new deal for middle managers. *People Management, 1*(12), 32-34.

Herriot, P., & Pemberton, C. (1995b). *New Deals: The Revolution in Managerial Careers.* Chichester: John Wiley & Sons.

Herriot, P., & Pemberton, C. (1996). Contracting careers. *Human Relations, 49*(6), 757-790.

Herriot, P., & Pemberton, C. (1997). Facilitating new deals. *Human Resource Management Journal, 7*(1), 45-56.

Herriot, P., Pemberton, C., & Hawtin, E. (1996). The career attitudes and intentions of managers in the finance sector. *British Journal of Management, 7*(2), 181-190.

Hesketh, B. & Gardner, D. (1993). Person-environment fit models: A reconceptualization and empirical test. *Journal of Vocational Behavior, 42*(3), 315-332.

Ho, V. T. (1999). Psychological contract breach: A study of multiple bases of comparison. *Paper presented at the Academy of Management Meeting,* August, Chicago.

Hodgkinson, G. P. (1992). Development and validation of the strategic locus of control scale. *Strategic Management Journal, 13*(4), 311-318.

Hoff Macan, T., Trusty, M. L., & Trimble, S. K. (1996). Spector's locus of control scale: Dimensionality and validity evidence. *Educational and Psychological Measurement, 56*(2), 349-357.

Holland, J. L. (1985). *Making vocational choices. A theory of vocational personalities and work environments.* Englewood Cliffs, NJ: Prentice Hall.

Homans, G. C. (1961). *Social Behaviour : Its Elementary Forms.* New York: Harcourt Brace Jovanovich.

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6,* 1-55.

Huseman, R. C., Hatfield, J. D., & Miles, E. W. (1985). Test for individual perceptions of job equity: Some preliminary findings. *Perceptual and Motor Skills, 61,* 1055-1064.

Huseman, R., Hatfield, J., & Miles, E. (1987). A new perspective on equity theory: The equity sensitivity construct. *Academy of Management Review, 12,* 222-234.

## I

Irving, P. G., & Meyer, J. P. (1994). Reexamination of the met-expectations hypothesis: A longitudinal analysis. *Journal of Applied Psychology, 79,* 937-949.

Isenberg, D. J. (1986). The structure and process of understanding. Implications for managerial action. in H. P. Sims, Jr. & D. A. Gioia (Eds.), *The thinking organization* (pp. 238-262). San Francisco: Jossey-Bass.

## J

James, L. A., & James, L. R. (1989). Integrating work environment perceptions: Explorations into the measurement of meaning. *Journal of Applied Psychology, 74,* 739-751.

Janssens, M., Sels, L., Van den Brande, I., & Overlaet, B. (2002). Multiple types of psychological contracts: A six-cluster solution. *Research Report.* Leuven: K.U. Leuven, Department of Applied Economics.

Jones, G. R. (1986). Socialization tactics, self-efficacy, and newcomers' adjustments to organizations. *Academy of Management Journal, 29,* 262-279.

Judge, T. A., & Bono, J. E. (2001). Relationship of core self-evaluations traits – self-esteem, generalized self-efficacy, locus of control, and emotional stability – with job satisfaction and job performance: A meta-analysis. *Journal of Applied Psychology, 86*(1), 80-92.

Judge, T. A., Bono, J. E., & Locke, E. A. (2000). Personality and job satisfaction: The mediating role of job characteristics. *Journal of Applied Psychology, 85*(2), 237-249.

Judge, T. A., & Bretz, R. D., Jr. (1992). Effects of work values on job choice decisions. *Journal of Applied Psychology, 88*(3), 261-271.

Judge, T. A., & Larsen, R. J. (2001). Dispositional affect and job satisfaction: A review and theoretical extension. *Organizational Behavior and Human Decision Processes, 86*(1), 67-98.

Judge, T. A., Locke, E. A., & Durham, C. C. (1997). The dispositional causes of job satisfaction: A core evaluations approach. *Research in Organizational Behavior, 19,* 151-188.

Judge, T. A., Locke, E. A., Durham, C. C., & Kluger, A. N. (1998). Dispositional effects on job and life satisfaction: The role of core evaluations. *Journal of Applied Psychology, 83,* 17-34.

## K

Kallenberg, A. L., & Reve, T. (1996). Contracts and Commitment: Economic and sociological perspectives on employment relations. *Human Relations, 46*(9), 1103-1132.

Kasprzyk, D., Duncan, G. J., Kalton, G., & Singh, M. P. (Eds). (1989). *Panel surveys.* New York: John Wiley & Sons.

Kickul, J. (2001a). Promises made, promises broken: An exploration of employee attraction and retention practices in small business. *Journal of Small Business Management, 4*(39), 320-335.

Kickul, J. (2001b). When organizations break their promises: Employee reactions to unfair processes and treatment. *Journal of Business Ethics, 29*(4), 289-307.

King, J. E. (2000). White-collar reactions to job insecurity and the role of the psychological contract: Implications for human resource management. *Human Resource Management, 39*(1), 79-92.

King, W. C., Jr., & Miles, E. W. (1994). The measurement of equity sensitivity. *Journal of Occupational and Organizational Psychology, 67,* 133-142.

King, W. C., Jr., Miles, E. W., & Day, D. D. (1993). A test and refinement of the equity sensitivity construct. *Journal of Organizational Behavior, 14,* 301-317.

Kinicki, A. J., & Vecchio, R. P. (1994). Influences on the quality of supervisor-subordinate relations: The role of time pressure, organizational commitment, and locus of control. *Journal of Organizational Behavior, 15,* 75-82.

Kline, R. B. (1998). *Principles and practice of structural equation modeling.* New York: Guilford Press.

Klonowicz, T. (2001). Discontented people : Reactivity and locus of control as determinants of subjective well-being. *European Journal of Personality, 15*(1), 29-48.

Knoop, R. (1981). Locus of control as a moderator between job characteristics and job attitudes. *Psychological Reports, 48,* 519-525.

Knoop, R. (1994). Work values and job satisfaction. *The Journal of Psychology, 128*(6), 683-690.

Kotter, J. P. (1973). The psychological contract: Managing the joining-up process. *California Management Review, 15*(3), 91-99.

Kren, L. (1992). The moderating effects of locus of control on performance incentives and participation. *Human Relations, 45*(9), 991-1013.

Kristof, A. L. (1996). Person-organization fit: An integrative review of its conceptualizations, measurement, and implications. *Personnel Psychology, 49,* 1-49.

## L

Lam, S. S., & Schaubroeck, J. (2000). The role of locus of control in reactions to being promoted and to being passed over: A quasi experiment. *Academy of Management Journal, 43*(1), 66-78.

Lance, C. E., Vandenberg, J., & Self, R. M. (2000). Latent growth models of individual change: The case of newcomer adjustment. *Organizational Behavior and Human Decision Processes, 83*(1), 107-140.

Landau, J., & Hammer, R. H. (1986). Clerical employees' perceptions of intraorganizational career opportunities. *Academy of Management Journal, 29*, 385-404.

Larwood, L., Wright, T. A., Desrochers, S., & Dahir, V. (1998). Extending latent role and psychological contract theories to predict intent to turnover and politics in business organizations. *Group & Organization Management, 23*(2), 100-123.

Lee, T. W., Ashford, S. J., Walsh, J. P., & Mowday, R. T. (1992). Commitment propensity, organizational commitment, and voluntary turnover: A longitudinal study of organizational entry processes. *Journal of Management, 18*(1), 15-32.

Lefcourt, H. M. (1982). *Locus of control. Current trends in theory and research.* Hillsdale, NJ: Lawrence Erlbaum Associates.

Lefcourt, H. M., & Wine, J. (1969). Internal versus external locus of control and the deployment of attention in experimental situations. *Canadian Journal of Behavioural Science, 1*, 167-181.

Lester, S. W., & Kickul, J. (2001). Psychological contracts in the 21st century: What employees value most and how well organizations are responding to these expectations. *Human Resource Planning, 24*(1), 10-21.

Lester, S. W., Turnley, W. H., & Bloodgood, J. M. (2000). Supervisor and subordinate views of psychological contract fulfillment: The impact of perceptual differences on employee work attitudes and behaviors. *Paper presented at the annual Academy of Management meeting,* Toronto, Canada.

Lester, S. W., Turnley, W. H., Bloodgood, J. M., & Bolino, M. C. (2002). Not seeing eye to eye: Differences in supervisor and subordinate perceptions of and attributions for psychological contract breach. *Journal of Organizational Behavior, 23*(1), 39-56.

Levenson, H. (1974). Activism and powerful others : Distinction within the concept of internal-external control. *Journal of Personality Assessment, 38*, 377-383.

Levenson, H. (1981). Differentiating among internality, powerful others, and chance. In H. Lefcourt (Ed.), *Research with the locus of control construct* (Vol. 1, pp. 15-62). London: Academic Press.

Leventhal, G. S. (1980). What should be done with equity theory ? New approaches to the study of fairness in social relationships. In K. S. Gergen, M. S. Greenberg, & R. H. Willis (Eds.), *Social exchange: Advances in theory and research* (pp. 27-55). New York: Plenum Press.

Levine, J. M., Resnick, L. B., & Higgins, E. T. (1993). Social foundations of cognition. *Annual Review of Psychology, 44*, 585-612.

Levinson, H., Price, C. R., Munden, K. J., Mandl, H. J., & Solley, C. M. (1962). *Men, Management and Mental Health.* Cambridge: Harvard University Press.

Lewis-McLear, K., & Taylor, M. S. (1997). Not seeing eye-to-eye : implications of discrepant psychological contracts and contract violation for the employment relationship. *Academy of Management Proceedings,* pp. 335-339. Academy of Management Conference, August, Boston.

Lewis-McLear, K., & Taylor, M. S. (1998). Psychological contract breach and the employment exchange: Perceptions from employees and employers. *Paper presented at the Academy of Management Meeting,* August, San Diego.

Little, T. D., Lindenberger, U., & Maier, H. (2000). Selectivity and generalizability in longitudinal research: On the effects of continuers and dropouts. In T. D. Little, K. U. Schnabel & J. Baumert (Eds.), *Modeling longitudinal and multilevel data. Practical issues, applied approaches, and specific examples* (pp. 187-200). Mahwah, NJ: Lawrence Erlbaum.

Locke, E. A. (1976). The nature and causes of job satisfaction. In M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 1297-1349). Chicago: Rand McNally.

Locke, E. A. & Taylor (1990). Stress, coping and the meaning of work, in A. P. Brief & W. R. Nord (Eds.), *Meanings of occupational work.* Massachutes: Lexington Books.

London, M. (1983). Toward a theory of career motivation. *Academy of Management Review, 8,* 620-630.

Lord, R. G. (2000). Social cognitions and leaderschip perceptions. *Paper presented at the 15th annual conference of the Society for Industrial and Organizational Psychology,* April, New Orleans.

Lord, R. G., & Foti, R. J. (1986). Schema theories, information processing and organizational behaviors. In H. P. Sims, Jr, D. A. Gioia (Eds.), *The Thinking Organization* (pp. 20-48). San Francisco: Jossey-Bass.

Louis, M. R. (1980). Surprise and sense-making: What newcomers experience and how they cope in unfamiliar organisational settings. *Administrative Science Quarterly, 25,* 226)251.

Louis, M. R. (1990). Acculturation in the workplace: Newcomers as lay ethnographers. In B. Schneider (Ed.), *Organizational climate and culture* (pp. 85-129). San Francisco, CA : Jossey-Bass.

Louis, M. R., Posner, B. Z., & Powell, G. N. (1983). The availability and helpfulness of socialization practices. *Personnel Psychology, 36,* 857-866.

Luthans, F., Baack, D., & Taylor, L. (1987). Organizational commitment: Analysis of antecedents. *Human Relations, 40*(4), 219-236.

## M

Mabey, C., Clark, T., & Daniels, K. (1996). A six year longitudinal study of graduate expectations: The implications for company recruitment and selection strategies. *International Journal of Selection and Assessment, 4,* 139-150.

MacNab, D., & Fitzsimmons, G. (1987). A multi-trait multi-method study of work-related needs, values, and preferences. *Journal of Vocational Behavior, 30,* 1-15.

MacNeil, T. R. (1985). Relational contract: What we do and do not know. *Wisconsin Law Review,* 483-525.

Major, D. A., Kozlowski, S. W., Chao, G. T., & Gardner, P. D. (1995). A longitudinal investigation of newcomer expectations, early socialization outcomes, and the moderating effects of role development factors. *Journal of Applied Psychology, 80,* 418-431.

Major, D. A., & Koslowski, S. W. (1997). Newcomer information seeking: Individual and contextual influences. *International Journal of Selection and Assessment, 5,* 16-28.

Makin, P., Cooper, C., & Cox, C. (1996). *Organizations and the Psychological Contract.* Westport, CT: Praeger.

March, J. G., & Simon, H. A. (1958). *Organizations.* New York: John Wiley & Sons.

Marsh, H. W., Balla, J. R., & McDonald, R. P. (1988). Goodness-of-fit indexes in confirmatory factor analysis: The effect of sample size. *Psychological Bulletin, 103*(3), 391-410.

Martin, G., Staines, H., & Pate, J. (1998). Linking job security and career development in a new psychological contract. *Human Resource Management Journal, 8*(3), 20-40.

Masterson, S. S., Lewis, K., Goldman, B. M., & Taylor, M. S. (2000). Integrating justice and social exchange: The differing effects of fair procedures and treatment on work relationships. *Academy of Management Journal, 43*(3), 738-748.

Mathieu, J. E., & Zajac, D. M. (1990). A review and meta-analysis of the antecedents, correlates and consequences of organizational commitment. *Psychological Bulletin, 108,* 171-194.

McArdle, J. J., & Aber, M. S. (1990). Patterns of change within latent variable structural equation models. In A. von Eye (Ed.), *Statistical methods in longitudinal research* (Vol. 1, pp.151-224). Boston: Academic Press.

McLean Parks, J., Kidder, D. L., & Gallagher, D. G. (1998). Fitting square pegs into round holes: Mapping the domain of contingent work arrangements onto the psychological contract. *Journal of Organizational Behavior, 19,* 697-730.

Meglino, B. M., Ravlin, E. C., & Adkins, C. L. (1991). Value congruence and satisfaction with a leader: An examination of the role of interaction. *Human Relations, 44,* 481-495.

Menard, S. (1991). Longitudinal research. *Sage University Paper Series: Quantitative applications in the social sciences* (n° 76). Newbury Park: Sage Publications.

Meredith, W., & Tisak, J. (1990). Latent curve analysis. *Psychometrika, 55,* 107-122.

Meyer, J. P., & Allen, N. J. (1988). Links between work experiences and organizational commitment during the first years of employment: A longitudinal analysis. *Journal of Occupational Psychology, 61,* 195-209.

Meyer, J., Bobocel, R., & Allen, N. (1991). Development of organizational commutment during the first year of employment: A longitudinal study of pre- and post-entry influences. *Journal of Management, 17*(4), 717-733.

Meyer, J. P., Irving, P. G., & Allen, N. J. (1998). Examination of the combined effects of work values and early work experiences on organizational commitment. *Journal of Organizational Behavior, 19*(1), 29-52.

Miceli, M. P. (1985). The effects of realistic job previews on newcomer behavior: A laboratory study. *Journal of Vocational Behavior, 26,* 277-289.

Michela, J. L. (1990). Within-person correlational design and analysis. *Review of Personality and Social Psychology, 11,* 279-311.

Milgrom, P., & Roberts, J. (1992). *Economics, Organizations, and Management.* Englewood Cliffs, NJ: Prentice Hall.

Miles, E. W., Hatfield, J. D., & Huseman, R. C. (1994). Equity sensitivity and outcome importance. *Journal of Organizational Behavior, 15,* 585-596.

Miles, R. E., & Snow, C. C. (1984). Designing strategic human resource systems. *Organizational Dynamics, 12,* 36-52.

Miller, V. D., & Jablin, F. M. (1991). Information seeking during organizational entry: Influences, tactics, and a model of the process. *Academy of Management Review, 16,* 92-120.

Millward, L. J., & Brewerton, P. M. (1999). Contractors and their psychological contracts. *British Journal of Management, 10,* 253-274.

Millward, L. J., & Brewerton, P. M. (2000). Psychological contracts: Employee relations for the twenty-first century ? In C. L. Cooper & I. T. Robertson (Eds.), *International review of industrial and organizational psychology* (Vol. 15, pp. 1-62). Chichester : John Wiley & Sons.

Millward, L. J., & Hopkins, L. J. (1998). Psychological contracts, organizational and job commitment. *Journal of Applied Social Psychology, 28*(16), 1530-1556.

Mirvis, P. H., & Hall, D. (1994). Psychological success and the boundaryless career. *Journal of Organizational Behavior, 15,* 365-380.

Mitchell, T. R., Holtom, B.C., & Lee, T. W. (2001). How to keep your best employees: Developing an effective retention policy. *Academy of Management Executive, 15*(4), 96-109.

Morrison, E. (1993a). A longitudinal study of the effects of information seeking on newcomer socialization. *Journal of Applied Psychology, 78*(2), 173-183.

Morrison, E. (1993b). Newcomer information seeking: Exploring types, modes, sources, and outcomes. *Academy of Management Journal, 36*(3), 557-589.

Morrison, E., & Robinson, S. L. (1997). When employees feel betrayed: A model of how psychological contract violation develops. *Academy of Management Review, 22*(1), 226-256.

Mowday, R. T., Porter, L. W., & Steers, R. M. (1982). *Employee Organization Linkages: Psychology of Commitment, Absenteeism and Turnover.* Orlando, FL : Academic Press.

Mudrack, P. E., Mason, E. S., & Stepanski, K. M. (1999). Equity sensitivity and business ethics. *Journal of Occupational and Organizational Psychology, 72*(4), 539-560.

Mumford, E. N. (1978). Job satisfaction : A method of analysis. In K. Legge & E. N. Mumford (Eds.), *Designing Organisations for Satisfaction and Efficiency* (pp. 18-33). Farnborough : Gower-Press.

Muthén, B., O., & Curran, P. J. (1997). General longitudinal modeling of individual differences in experimental designs : A latent variable framework for analysis and power estimation. *Psychological Methods, 2*(4), 371-402.

## N

Nelson, D. L., Quick, J. C., & Joplin, J. R. (1991). Psychological contracting and newcomer socialization. *Journal of Social Behavior and Personality, 6,* 55-72.

Nicholson, N., & Johns, G. (1985). The absence culture and the psychological contract : Who's in control of absence ? *Academy of Management Review, 10,* 397-407.

Noe, R. A. (1996). Is career management related to employee development and performance? *Journal of Organizational Behavior, 17,* 119-133.

## O

O'Brien, G. E. (1984). Locus of control, work and retirement. In H. M. Lefcourt (Ed.), *Research with the locus of control construct* (Vol. 3, pp. 7-72). New York : Academic Press.

O'Brien, G. E., & Dowling, P. (1980). The effects of congruency between perceived and desired job attributes upon job satisfaction. *Journal of Occupational Psychology, 53,* 121-130.

O'Neill, B. S., & Mone, M. A. (1998). Investigating equity sensitivity as a moderator of relations between self-efficacy and workplace attitudes. *Journal of Applied Psychology, 83*(5), 805-816.

Oliver, N. (1990). Work rewards, work values, and organizational commitment in an employee-owned firm : Evidence from the U.K. *Human Relations, 43,* 513-526.

Organ, D. W. (1988). *Organizational Citizenship Behavior.* Lexington, MA : Lexington Books.

Organ, D. W., & Konovsky, M. (1989). Cognitive versus affective determinants of organizational citizenship behavior. *Journal of Applied Psychology, 7*(1), 157-164.

Organ, D. W., & Ryan, K. (1995). A meta-analytic review of attitudinal and dispositional predictors of organizational citizenship behavior. *Personnel Psychology, 48,* 775-802.

Orpen, C. (1994). The effects of organizational and individual career management on career success. *International Journal of Manpower, 15* (1), 27-37.

Osipow, S. H. (1987). Applying person-environment theory to vocational behavior. *Journal of Vocational Behavior, 31,* 333-36.

Ostroff, C., & Koslowski, S. (1992). Organizational socialization as a learning process: The role of information acquisition. *Personnel Psychology, 45,* 849-874.

## P

Parson, C. K., Cable, D., & Wikerson, J. M. (1999). Assessment of applicant work values through interviews : the impact of focus and functional relevance. *Journal of Occupational and Organizational Psychology, 72*(4), 561-566.

Patterson, M., Payne, R., & West, M. (1996). Collective climates: A test of their sociopsychological significance. *Academy of Management Journal, 39*(6), 1675-1691.

Patton, W. (2001). Changing career: The role of values. In A. Collin & R. A. Young (Eds.), *The future of career* (pp. 69-82). Cambridge : Cambridge University Press.

Pervin, L. A. (1987). Person-environment congruence in the light of the person situation controversy. *Journal of Vocational Behavior, 31,* 222-230.

Phares, E. J. (1968). Differential utilization of information as a function of internal-external locus of control. *Journal of Personality, 36,* 649-662.

Ployhart, R. E., & Hakel, M. D. (1998). The substantive nature of performance variability: Predicting interindividual differences in intraindividual performance. *Personnel Psychology, 51,* 859-901.

Porter, L. W., Pearce, J. L., Tripoli, A. M., & Lewis, K. M. (1998). Differential perceptions of employers' inducements: Implications for psychological contracts. *Journal of Organizational Behavior, 19,* 769-782.

Pulakos, E. D., & Schmitt, N. (1983). A longitudinal study of a valence approach for the prediction of job satisfaction of new employees. *Journal of Applied Psychology, 68,* 307-312.

Putti, J. M., Aryee, S., Liang, T. K. (1989). Work values and organizational commitment: A study in the Asian context. *Human Relations, 42,* 275-288.

## R

Ravlin, E. C., & Meglino, B. M. (1987). Effect of values on perception and decision making: A study of alternative work values measures. *Journal of Applied Psychology, 72*(4), 666-673.

Raykov, T. (1997). Growth curve analysis of ability means and variances in measures of fluid intelligence of older adults. *Structural Equation Modeling, 4*(4), 283-319.

Reichers, A. E. (1987). An interactionist perspective on newcomer socialization rates. *Academy of Management Review, 12*(2), 278-287.

Renn, R. W., & Fedor, D. B. (2001). Development and field test of a feedback seeking, self-efficacy, and goal-setting model of work performance. *Journal of Management, 27,* 563-583.

Riordan, C. M., Weatherly, E. W., Vandenberg, R. J., & Self, R. M. (2001). The effects of pre-entry experiences and socialization tactics on newcomer attitudes and turnover. *Journal of Managerial Issues, 13*(2), 159-176.

Roberts, B. W., & Hogan, R. (Ed.) (2001). *Personality in the workplace.* Washinton, DC: American Psychological Association.

Robinson, S. L. (1995). Violation of psychological contracts : Impact on employee attitudes. In L. E. Tetrick & J. Barling (Eds.), *Changing Employment Relations. Behavioral and Social Perspectives* (pp. 91-108). Washington: American Psychological Association.

Robinson, S. L. (1996). Trust and breach of the psychological contract. *Administrative Science Quarterly, 41,* 574-599.

Robinson, S. L., Kraatz, M. S., & Rousseau, D. M. (1994). Changing obligations and the psychological contract: A longitudinal study. *Academy of Management Journal, 37*(1), 137-152.

Robinson, S. L., & Morrison, E. W. (1995). Psychological contracts and OCB: The effect of unfulfilled obligations on civic virtue behavior. *Journal of Organizational Behavior, 16,* 289-298.

Robinson, S. L., & Morrison, E. W. (2000). The development of psychological contract breach and violation: A longitudinal study. *Journal of Organizational Behavior, 21,* 525-546.

Robinson, S. L., & Rousseau, D. M. (1994). Violating the psychological contract: Not the exception but the norm. *Journal of Organizational Behavior, 15,* 245-259.

Roe, R. A., & Ester, P. (1999). Values and work: Empirical findings and theoretical perspective. *Applied Psychology : An International Review, 48*(1), 1-21.

Roehling, M. V., Cavanaugh, M. A., Moynihan, L. M., & Boswell, W. (2000). The nature of the new employment relationship : A content analysis of the practitioner and academic literatures. *Human Resource Management, 39*(4), 305-320.

Ronen, S. (1986). Equity perception in multiple comparisons: A field study. *Human Relations, 39,* 333-346.

Ross, M., Schwartz, S. H., Surkiss, S. (1999). Basic individual values, work values, and the meaning of work. *Applied Psychology : An International Review, 48*(1), 49-71.

Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs, 80*(1, whole No. 609).

Rounds, J., & Hesketh, B. (1994). The theory of work adjustment : Unifying principles and concepts. In M. L. Savikas & R. W. Lent (Eds.), *Convergence in career development theories. Implications for science and practice* (pp. 177-186). Palo Alto (CA) : CPP Books.

Rousseau, D. M. (1989). Psychological and implied contracts in organizations. *Employee Responsibilities and Rights Journal, 2*(2), 121-139.

Rousseau, D. M. (1990). New hire perceptions of their own and their employer's obligations: A study of psychological contracts. *Journal of Organizational Behavior, 11,* 389-400.

Rousseau, D. M. (1995). *Psychological Contracts in Organizations. Understanding Written and Unwritten Agreements.* Thousand Oaks, CA: Sage.

Rousseau, D. M. (1996). Changing the deal while keeping the people. *Academy of Management Executive, 10*(1), 50-58.

Rousseau, D. M. (1998a). The 'problem' of the psychological contract considered. *Journal of Organizational Behavior, 19,* 665-671.

Rousseau, D. M. (1998b). *The psychological contract inventory.* Technical Report, CCER, Heinz School of Public Policy, Carnegie-Mellon University, Pittsburgh, PA.

Rousseau, D. M. (2001a). The idiosyncratic deal : Flexibility versus fairness ? *Organizational Dynamics, 29*(4), 260-273.

Rousseau, D. M. (2001b). Schema, promise and mutuality: The building blocks of the psychological contract. *Journal of Occupational and Organizational Psychology, 74,* 511-541.

Rousseau, D. M., & Anton, R. J. (1988). Fairness and implied contract obligations in job terminations: A policy capturing study. *Human Performance, 1*(4), 273-289.

Rousseau, D. M., & Anton, R. J. (1991). Fairness and implied contract obligations in job terminations: The role of contributions, promises, and performance. *Journal of Organizational Behavior, 12,* 287-299.

Rousseau, D. M., & Aquino, K. (1993). Fairness and implied contract obligations in job terminations: the role of remedies, social accounts and procedural justice. *Human Performance, 6*(2), 135-149.

Rousseau, D. M., & Greller, M. M. (1994). Human resource practices: Administrative contract makers. *Human Resource Management, 33*(3), 385-401.

Rousseau, D. M., & McLean Parks, J. (1993). The contracts of individuals and organizations. In L. L. Cummings & B. M. Staw (Eds.), *Research in Organizational Behavior* (Vol. 15, pp. 1-43). Greenwich, CT: JAI Press.

Rousseau, D. M., & Schalk, R. (Eds.) (2000). *Psychological contracts in employment: International perspectives.* Sage : London.

Rousseau, D. M., & Tijoriwala, S. A. (1998). Assessing psychological contracts: Issues, alternatives and measures. *Journal of Organizational Behavior, 19,* 679-695.

Rousseau, D. M., & Tijoriwala, S. A. (1999). What's a good reason to change? Motivated reasoning and social accounts in promoting organizational change. *Journal of Applied Psychology, 84*(4), 514-528.

Rousseau, D. M., & Wade-Benzoni, K. A. (1994). Linking strategy and human resource practices: How employee and customer contracts are created. *Human Resource Management, 33*(3), 463-489.

Rousseau, D. M., & Wade-Benzoni, K. A. (1995). Changing individual-organization attachments: A two-way street. In A. Howard (Ed.), *The Changing Nature of Work* (pp. 290-322). San Francisco: Jossey-Bass.

## S

Saks, A. M., & Ashforth, B. E. (1996). Proactive socialization and behavioral self-management. *Journal of Vocational Behavior, 48,* 301-323.

Saks, A. M., & Ashforth, B. E. (1997a). Organizational socialization: Making sense of the past and present as a prologue for the future. *Journal of Vocational Behavior, 51*(2), 234-279.

Saks, A. M., & Ashforth, E. (1997b). Socialization tactics and newcomer information acquisition. *International Journal of Selection and Assessment, 5*(1), 48-61.

Salancik, G. R., & Pfeffer, J. (1978). A social information processing approach to job attitudes and task design. *Administrative Science Quarterly, 23,* 224-253.

Schalk, R., & Freese, L. (1997). New facets of commitment in response to organizational change : Research trends and the Dutch experience. In C. L. Cooper & D. M. Rousseau (Eds.), *Trends in Organizational Behavior* (Vol. 4, pp. 107-123). New York: John Wiley & Sons.

Schalk, R., Freese, L., & Van den Bosch, J. (1995). Het psychologisch contract van part-timers en full-timers: Een onderzoek naar de verwachtingen van werknemers over wederzijdse verplichtingen tussen organisatie en werknemer in de arbeidssituatie [The psychological contract of part-time and full-time employees: An investigation into the expectations of employees about the reciprocal obligations between the organization and the employee in the employment situation]. *Gedrag en Organisatie, 8*(5), 307-317.

Schalk, R. & Huiskamp, R. (2001). Antecedents of psychological contracts and organizational commitment. *Paper presented at the Dutch HRM Conference , Nijmegen, The Netherlands, November 2001.*

Schein, E. H. (1965). *Organizational Psychology*. Englewood Cliffs, NJ: Prentice-Hall.

Schein, E. H. (1968). Organizational socialization and the profession of management. *Industrial Management Review, 9,* 1-16.

Schein, E. H. (1971). The individual, the organization and the career: A conceptual scheme. *The Journal of Applied Behavioral Science, 7,* 1971.

Schein, E. H. (1978). *Career Dynamics: Matching Individual and Organisational Needs*. Reading, MA: Addison-Wesley.

Schein, E. H. (1980). *Organizational Psychology* (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall.

Schein, E. H. (1985). *Career Anchors: Discovering Your Real Values.* San Diego, CA: University Associates Inc.

Schein, E. H. (1993). *Career Anchors : Discovering Your Real Values : revised edition.* Amsterdam: Pfeffer & Company.

Schnabel, K. U., Little, T. D., & Baumert, J. (2000). Modeling longitudinal and multilevel data. In T. D. Little, K. U. Schnabel, & J. Baumert (Eds.), *Modeling longitudinal and multilevel data. Practical issues, applied approaches and specific examples* (pp. 9-13). Mahwah, NJ: Lawrence Erlbaum.

Schwab, D. P. (1999). *Research methods for organizational studies.* Mahwah, NJ: Lawrence Erlbaum Associates.

Sekaran, U. (2000). *Research methods for business: A skill building approach* (3rd edition). New York: John Wiley & Sons.

Sels, L., Janssens, M., Van den Brande, I., & Overlaet, B (2002). Assessing the nature of psychological contracts : Conceptualization and measurement. *Research report.* Leuven: K.U.Leuven, Department of Applied Economics.

Settoon, R. P., Bennett, N., & Liden, R. C. (1996). Social exchange in organizations: Perceived organizational support, leader-member exchange and employee reciprocity. *Journal of Applied Psychology, 81*(3), 219-227.

Shah, P. P. (1998). Who are employees' social referents ? Using a network perspective to determine referent others. *Academy of Management Journal, 41*(3), 249-268.

Shapira, Z., & Griffith, T. L. (1990). Comparing the work values of engineers with managers, production, and clerical workers: A multivariate analysis. *Journal of Organizational Behavior, 11,* 281-292.

Shore, L. M., & Barksdale, K. (1998). Examining the degree of balance and level of obligation in the employment relationship: A social exchange approach. *Journal of Organizational Behavior, 19,* 731-744.

Shore, L. M., & Tetrick, L. E. (1994). The psychological contract as an explanatory framework in the employment relationship. In C. L. Cooper & D. M. Rousseau (Eds.), *Trends in organizational behavior* (Vol. 1, pp. 91-109). New York: John Wiley & Sons.

Skinner, E. A. (1996). A guide to constructs of control. *Journal of Personality and Social Psychology, 71,* 549-570.

Soh, S. (2000). Effects of work values on interest-job preference fit across cultures. *Paper presented at the 15th annual conference of the Society for Industrial and Organizational Psychology,* New Orleans, Louisiana, April 14-16.

Sparrow, P. R. (1996). Transitions in the psychological contract: Some evidence from the banking sector. *Human Resource Management Journal, 6*(4), 75-92.

Sparrow, P. R., & Cooper, C. L. (1998). New organizational forms: The strategic relevance of future psychological contract scenarios. *Canadian Journal of Administrative Sciences, 15*(4), 356-371.

Spector, P. E. (1982). Behavior in organizations as a function of employee's locus of control. *Psychological Bulletin, 91*(3), 482-497.

Spector, P. E. (1988). Development of the Work Locus of Control Scale. *Journal of Occupational Psychology, 61,* 335-340.

Spector, P. E. *et al.* (2001). Do national levels of individualism and internal locus of control relate to well-being : An ecological level international study. *Journal of Organizational Behavior,* 22, 815-832.

Stephens, G. K. (1994). Crossing internal career boundaries: The state of research on subjective career transitions. *Journal of Management, 20*(2), 479-501.

Stevens, J. (1996). *Multivariate statistics for the social sciences* (3rd edition). Mahwah, NJ : Lawrence Erlbaum.

Stiles, P., Gratton, L., Truss, C., Hope-Hailey, V., & McGovern, P. (1997). Performance management and the psychological contract. *Human Resource Management Journal, 7*(1), 57-66.

Sturges, J. (1999). What it means to succeed: Personal conceptions of career success held by male and female managers at different ages. *British Journal of Management, 10,* 239-252.

Sullivan, S. E. (1999). The changing nature of careers: A review and research agenda. *Journal of Management, 25*(3), 457-484.

Super, D. E. (1957). *The psychology of careers.* New York: Prentice-Hall.

Super, D. E. (1980). A life span life space approach to career development. *Journal of Vocational Behavior, 16,* 282-298.

Super, D. E., *et al.* (1985). *The salience inventory.* Palo Alto: Consulting Psychologists Press.

Super, D. E., *et al.* (1985). *The values scale.* Palo Alto: Consulting Psychologists Press.

Super, D. E. (1990). A life-span approach to career development. In D. Brown & L. Brooks (Eds.), *Career choice and development* (2nd ed., pp. 197-261). San Francisco: Jossey-Bass.

Super, D. E. (1995). Values: Their nature, assessment, and practical use. In D. E. Super & B. Sverko (Eds.), *Life roles, values, and careers* (pp. 54-61). San Francisco: Jossey-Bass.

Sverko, B., & Vizek-Vidovic, V. (1995). Studies of the meaning of work: Approaches, models, and some of the findings. In D. E. Super & B. Sverko (Eds.), *Life roles, values, and careers* (pp. 3-21). San Francisco: Jossey-Bass.

Sverko, B., & Super, D. E. (1995). The findings of the work importance study. In In D. E. Super & B. Sverko (Eds.), *Life Roles, Values, and Careers* (pp. 349-358). San Francisco, CA: Jossey-Bass.

# T

Tang, T. L. P., Baldwin, L. J., & Frost, A. G. (1997). Locus of control as a moderator of the self-reported performance feedback – personal sacrifice relationship. *Personality and Individual Differences, 22*(2), 201-211.

Taormina, R. J. (1997). Organizational socialization: A multidomain, continuous process model. *International Journal of Selection and Assessment, 5*(1), 29-47.

Taris, T. W. (2000). *A primer in longitudinal analysis.* London: Sage.

Taris, R., & Feij, J. A. (2000). Longitudinal examination of the relationship between supplies-values fit and work outcomes. *Paper presented at the 15th annual conference of the Society of Industrial and Organizational Psychology,* New Orleans, Louisiana, April 14-16.

Ten Brink , B. E. H., den Hartog, D. N., Koopman, P. L., & van Muijen, J. J. (1999). De bindende kracht van inspirerend leiderschap: Een onderzoek naar leiderschap, betrokkenheid, psychologisch contract en vertrouwen

[The binding force of inspirational leadership: A study on leadership, commitment, psychological contract and trust]. *Gedrag en Organisatie, 12*(5), 241-254.

Thomas, H. D. C., & Anderson, N. (1998). Changes in newcomers' psychological contracts during organizational socialization : A study of British recruits entering the British Army. *Journal of Organizational Behavior, 19*, 745-767.

Tinsley, C., & Lee, C. (1999). Breach of psychological contracts in work groups. *Paper presented at the National Academy of Management Meetings, August,* Chicago.

Tisak, J., & Meredith, W. (1990). Longitudinal factor analysis. In A. Von Eye (Ed.), *Statistical methods in longitudinal research* (Vol. 1, pp. 125-149). Boston: Academic Press.

Turnley, W. H., & Feldman, D. C. (1998). Psychological contract violation during corporate restructuring. *Human Resource Management, 37(1)*, 71-83.

Turnley, W. H., & Feldman, D. C. (1999). The impact of psychological contract violations on exit, voice, loyalty, and neglect. *Human Relations, 52*(7), 895-922.

Turnley, W. H., & Feldman, D. C. (2000). Re-examining the effects of psychological contract violations : unmet expectations and job dissatisfaction as mediators. *Journal of Organizational Behavior, 21,* 25-42.

## V

Van den Brande, I. (1999). Het psychologisch contract. Een kritische discussie van het concept en haar operationalisatie [The psychological contract. A critical discussion of the concept and its operationalization]. *Tijdschrift voor Arbeidsvraagstukken, 15*(1), 65-78.

Van den Brande, I. (2002). *Het psychologisch contract tussen werknemer en werkgever: Een survey-onderzoek bij Vlaamse werknemers* [The psychological contract between employee and employer: A survey among Flemish employees]. Non-published doctoral dissertation, Leuven: Katholieke Universiteit Leuven.

Vandenberg, R. J., & Lance, C. E. (2000). A review and synthesis of the measurement invariance literature : Suggestions, practices, and recommendations for organizational research. *Organizational Research Methods, 3,* 4-69.

Vandenberg, R. J., & Self, R. M. (1993). Assessing newcomers' changing commitments to the organization during the first six months of work. *Journal of Applied Psychology, 78,* 557-568.

van der Kamp, L. J. T., & Bijleveld, C. C. J. H (1998). Methodological issues in longitudinal research. In C. C. J. H Bijleveld & van der Kamp L. J. T. (Eds.), *Longitudinal data analysis. Designs, models and methods* (pp. 1-45). London: Sage.

Van Maanen, J. (1976). Breaking in: Socialization to work. In R. Dubin (Ed.), *Handbook of work, organization, and society.* Chicago: Rand McNally.

Van Maanen, J., & Schein, E. H. (1979). Toward a theory of organizational socialization. In B. M. Staw (Ed.), *Research in Organisational Behavior,* Vol. 1 (pp. 209-264). Greenwich (CT): JAI Press.

Van Vianen, A. E. M. (2000). Person-organization fit: The match between newcomers' and recruiters' preferences for organizational cultures. *Personnel Psychology, 53*(1), 113-149.

Vondracek, F. W. (1990). A developmental-contextual approach to career development research. In R. A. Young & W. A. Borgen (Eds.), *Methodological approaches to the study of career* (pp. 37-69). New York: Praeger.

## W

Wanous, J. P., & Colella, A. (1989). Organisational entry research: Current status and future research directions. In G. R. Ferris & K. M. Rowland (Eds.), *Research in Personnel and Human Resources Management* (pp. 67-130). Greenwich, CT: JAI Press.

Wanous, J. P., Poland, T. D., Premack, S. L., & Davis, K. S. (1992). The effects of met expectations on newcomer attitudes and behaviors: A review and meta-analysis. *Journal of Applied Psychology, 77,* 288-297.

Weick, K. (1981). *The social psychology of organization.* Reading, MA: Addison-Wesley.

Weick, K., & Berlinger, L. R. (1989). Career improvisation in self-designing organizations. In M. B. Arthur, D. T. Hall, & B. S. Lawrence (Eds.), *Handbook of career theory* (pp. 313-328). Cambridge: Cambridge University Press

Willett, J. B., & Sayer, A. G. (1994). Using covariance structure analysis to detect correlates and predictors of individual change over time. *Psychological Bulletin, 116,* 363-381.

Williams, L. J., & Podsakoff, P. M. (1989). Longitudinal field methods for studying reciprocal relationships in organizational behavior research: Toward improved causal analysis. In L. L. Cummings & B. L. Staw (Eds.), *Research in Organizational Behavior* (Vol. 11, pp. 247-292). Greenwich, CT: JAI Press.

Williamson, O. E. (1985). *The Economic Institutions of Capitalism.* New York: Free Press.

Williamson, O. E. (1988). The logic of economic organization. *Journal of Law, Economics, and Organization, 4,* 65-93.

Witt, L. A. (1991a). Equal opportunity perceptions and job attitudes. *Journal of Social Psychology, 131,* 431-433.

Witt, L. A. (1991b). Exchange ideology, job attitudes, and organizational citizenship behaviors. *Journal of Applied Social Psychology, 21,* 1490-1501.

Witt, L. A. (1992). Exchange ideology as a moderator of the relationships between importance of participation in decision making and job attitudes. *Human Relations, 45,* 73-85.

Witt, L. A., & Wilson, J. W. (1990). Income sufficiency as a predictor of job satisfaction and organizational commitment: Dispositional differences. *Journal of Social Psychology, 130,* 267-268.

Wothke, W. (2000). Longitudinal and multigroup modeling with missing data. In T. D. Little, K. U. Schnabel & J. Baumert (Eds.), *Modeling longitudinal and multilevel data. Practical issues, applied approaches, and specific examples* (pp. 219-240). Mahwah, NJ: Lawrence Erlbaum.

Wright, T. A., & Larwood, L. (1997). Further examination of the cosmopolitan-local latent role construct. *Psychological Reports, 81,* 897-898.

Wyer, R. S., Jr., & Gruenfeld, D. H. (1995). Information processing in social contexts: Implications for social memory and judgement. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology* (Vol. 27, pp. 49-91). New York: Academic Press.

## Z

Zahrly, J., & Tosi, H. (1989). The differential effect of organizational induction process on early work role adjustment. *Journal of Organizational Behavior, 10,* 59-74.

# APPENDICES

# Appendix 2.1
# Overview of Operationalizations of the Psychological Contract Content

Table A2.1: Overview of Dimensions, Items and Instructions Used to Assess the Content of the Psychological Contract.

| AUTHORS | EMPLOYER INDUCEMENTS | EMPLOYEE CONTRIBUTIONS |
|---|---|---|
| 1. Coyle-Shapiro (2001a) | 14 items aggregated into one scale (T1 $\alpha$ = .81; T2 $\alpha$ = .80)<br>1. Long-term job security<br>2. Good career prospects<br>3. Support with personal problems<br>4. Opportunity to do interesting work<br>5. Up-to-date training and development<br>6. Freedom to do job well<br>7. Opportunity to be involved in decisions<br>8. Pay increases to maintain standard of living<br>9. Fair pay compared to employees doing similar work in other organizations<br>10. Policies and procedures that help to do job well<br>11. Necessary training to do job well<br>12. Support to learn new skills<br>13. Fair pay for responsibilities<br>14. Fringe benefits comparable to employees doing similar work in other organizations<br><br>*Operationalization: Extent to which managers believe the organization is obligated to provide each of these inducements to employees and the extent to which they believe employees are obligated to provide the employer the employee contributions (1 = not at all; 5 = to a very great extent)* | 10 items aggregated into 1 scale (T1 $\alpha$ = .82; T2 $\alpha$ = .82)<br>*Examples:*<br>- working extra hours when necessary<br>- volunteering to do tasks that are not part of the job<br>- look for better ways of doing the job |
| 2. Coyle-Shapiro (2001b) | 15 items aggregated into 1 scale<br>(same as Coyle-Shapiro, 2001a)<br>T1 $\alpha$ = .82; T2 $\alpha$ = .84<br><br>*Operationalization: Extent to which employees believe the organization is obligated to provide each of these inducements (1 = not at all; 5 = to a very great extent)* | |
| 3. Coyle-Shapiro & Kessler (1998) | 8 items representing 2 dimensions<br>(no information on $\alpha$-reliabilities)<br>*Transactional obligations:*<br>1. Fair pay compared to others<br>2. Fringe benefits<br>3. Fair pay for responsibility<br>4. Pay increases<br>*Relational obligations:*<br>5. Involvement in decision-making<br>6. Support to learn new skills<br>7. Long term job security<br>8. Good career prospects<br><br>*Operationalization: Extent to which employees and mangers felt is was important for the organization to provide each of the inducements to the employees and the extent to which they believe employees are obligated to provide the organization each of the contributions* | 8 items representing 2 dimensions<br>(no information on $\alpha$-reliabilities)<br>*In-job obligations:*<br>1. Look for better ways of doing the job<br>2. Look for ways to improve the way things are done in work<br>3. Adapt to changes in how I do my job<br>4. Look for ways to save costs in work area<br>5. Flexible in what is done as part of the job<br>*Extra-role obligations:*<br>6. Work unpaid hours to finish a task when needed<br>7. Work extra hours when needed<br>8. Flexible in working hours |

| AUTHORS | EMPLOYER INDUCEMENTS | EMPLOYEE CONTRIBUTIONS |
|---|---|---|
| 4. Coyle-Shapiro & Kessler (2000a) | 8 items representing 2 dimensions (identical to Coyle-Shapiro & Kessler, 1998)<br>*Transactional obligations* ($\alpha$ = .82):<br>1. Fair pay compared to others<br>2. Fringe benefits<br>3. Fair pay for responsibility<br>4. Pay increases<br>*Relational obligations* ($\alpha$ = .62):<br>1. Involvement in decision-making<br>2. Support to learn new skills<br>3. Long term job security<br>4. Good career prospects | 8 items representing 2 dimensions (identical to Coyle-Shapiro & Kessler, 1998)<br>*Job obligations* ($\alpha$ = .86):<br>1. Look for better ways of doing the job<br>2. Look for ways to improve the way things are done in work<br>3. Adapt to changes in how I do my job<br>4. Look for ways to save costs in work area<br>5. Flexible in what is done as part of the job<br>*Relational obligations* ($\alpha$ = .73):<br>1. Work unpaid hours to finish a task when needed<br>2. Work extra hours when needed<br>3. Flexible in working hours |
| | *Operationalization: Extent to which employees believed their employer was obligated to provide each of the inducements and the extent to which they believed they owed their employer each of the contributions (1 = not at all; 5 = to a very great extent)* | |
| 5. Coyle-Shapiro & Kessler (2000b) | 8 items representing 2 dimensions<br>*Transactional obligations* ($\alpha$ = .82):<br>1. Fair pay compared to others<br>2. Fringe benefits<br>3. Fair pay for responsibility<br>4. Pay increases<br>*Relational obligations* ($\alpha$ = .63):<br>5. Involvement in decision-making<br>6. Support to learn new skills<br>7. Long-term job security<br>8. Good career prospects | 12 items aggregated into 1 scale ($\alpha$ = .88)<br>1. Work extra hours when needed<br>2. Volunteer to do tasks that are not part of the job<br>3. Look for better ways of doing the job<br>4. Accept a transfer to a different job in the organization<br>5. Look for ways to improve the way things are done<br>6. Flexible in what is done as part of the job<br>7. Flexible in working hours<br>8. Work unpaid hours to finish a task<br>9. Look for ways to save costs and adapt to changes in the way the job is done<br>10. Make an effort to keep abreast of current developments<br>11. Actively support new ways of working<br>12. Volunteer to do things that are not part of the job |
| | *Operationalization: Extent to which employees and managers believe the organization is obligated to provide each of these inducements and the extent to which they believe employees owe the organization each of the employee contributions* | |
| 6. Coyle-Shapiro & Kessler (2000c) | 9 items representing 3 dimensions<br>*Transactional obligations* ($\alpha$ = .82):<br>1. Fair pay compared to others<br>2. Fringe benefits<br>3. Fair pay for responsibility<br>4. Pay increases<br>*Training obligations* ($\alpha$ = .80):<br>5. Training to do job well<br>6. Training and development<br>7. Support to learn new skills<br>*Relational obligations* ($\alpha$ = .62):<br>8. Long term job security<br>9. Good career prospects | |
| | *Operationalization: Extent to which employees and managers believe the organization is obligated to provide each of these inducements (1 = not at all; 5 = to a very great extent)* | |

| Authors | Employer Inducements | Employee Contributions |
|---|---|---|
| 7. Coyle-Shapiro & Kessler (2002) | 1. 14 items aggregated into one scale; α = .87<br>1. Long-term job security<br>2. Good career prospects<br>3. Support with personal problems<br>4. Opportunity to do interesting work<br>5. Up-to-date training and development<br>6. Freedom to do job well<br>7. Opportunity to be involved in decisions<br>8. Pay increases to maintain standard of living<br>9. Fair pay compared to employees doing similar work in other organizations<br>10. Policies and procedures that help to do job well<br>11. Necessary training to do job well<br>12. Support to learn new skills<br>13. Fair pay for responsibilities<br>14. Fringe benefits comparable to employees doing similar work in other organizations<br><br>*Operationalization: Extent to which employees believe their organization is obligated to provide each of these inducements* | |
| 8. Freese & Schalk (1996)<br>9. Schalk, Freese & Van den Bosch (1996) | 37 items representing 5 dimensions<br>1. Job content (5 items); α = .71<br>2. Opportunities for personal development (4 items); α = .61<br>3. Social aspects (4 items); α = .67<br>4. HRM policy (16 items); α = .82<br>5. Rewards (9 items); α = .80<br><br>*Operationalization: Employees' perceptions of the extent to which their organization should provide them with each of these practices* | |
| 10. Freese & Schalk (1999) | Only measure of evaluation (cf. Table A2.2) | 21 items aggregated into one scale (α = .84)<br>*Examples:*<br>- Protect the organization's image<br>- Follow the organization's norms and policies<br>- Only being absent when you are really ill<br><br>*Operationalization: Employees' perceptions of the extent to which they felt obligated to provide their organization with each of the employee contributions* |

| AUTHORS | EMPLOYER INDUCEMENTS | EMPLOYEE CONTRIBUTIONS |
|---|---|---|
| 11. Guest & Conway (2000; 2002) | 13 items aggregated into 1 scale ($\alpha$ = .81)<br>1. Training and development opportunities<br>2. Opportunities for promotion<br>3. Recognition for innovative or new ideas<br>4. Feedback on performance<br>5. Interesting work<br>6. A fair rate of pay<br>7. An attractive benefits package<br>8. Not to make unreasonable demands of employees<br>9. Fair treatment<br>10. Reasonable job security<br>11. A pleasant working environment<br>12. A safe working environment<br>13. Open two-way communication<br><br>*Operationalization: Senior managers' reports of the extent to which the organization has promised or committed itself to provide each of the inducements (1 = no promises made; 2 = suggestion of a promise; 3 = strong suggestion of a promise; 4 = written or verbal promises made)* | |
| 12. Herriot, Manning & Kidd (1997) | 12 categories resulting from content analysis<br>1. Training<br>2. Fairness of HR-procedures<br>3. allowing time off to meet personal or family needs<br>4. consulting and communicating with employees on matters which affect them<br>5. minimal interference with employees in terms of how they do their job (discretion)<br>6. to act in a personally an socially responsible and supportive way towards employees (humanity)<br>7. recognition of or reward for special contribution or long service<br>8. provision of a safe and congenial work environment<br>9. fairness and consistency in the application of roles and disciplinary procedures (justice)<br>10. Equitable with respect to market values and consistently awarded across the organization (pay)<br>11. Benefits: fairness & consistency in the administration of the benefit systems<br>12. Organizations trying hard to provide what job security they can (security)<br><br>*Operationalization: Employees and Managers report of incidents at work where an employee or the organization went beyond or fell short of what might be reasonably expected of them in their treatment of the other party* | 7 categories resulting from content analysis<br>1. work the hours you are contracted to work<br>2. to do a good job in terms of quality and quantity<br>3. to deal honestly with clients and with the organization<br>4. staying with the organization, guarding its reputation and putting its interests first (loyalty)<br>5. property : treating the organization's property in a careful way<br>6. self-presentation: dressing and behaving correctly with customers and colleagues<br>7. Flexibility: being willing to go beyond one's own job description, especially in emergency |

| AUTHORS | EMPLOYER INDUCEMENTS | EMPLOYEE CONTRIBUTIONS |
|---|---|---|
| 13. Ho (1999) | 39 items representing 9 dimensions and 3 higher-order dimensions:<br>*Job nature;* $\alpha = .76$<br>1. Scope of responsibility (5 items)<br>2. Opportunities for dynamic and challenging performance (5 items)<br>3. Opportunities for career development within the organization (5 items)<br>4. Training and development to enhance employability outside the organization (5 items)<br>*Relational;* $\alpha = .56$<br>5. Security (5 items)<br>6. Term of the employment (5 items)<br>7. Loyalty and concern for the employee (5 items)<br>*Transactional;* $\alpha = .64$<br>8. High pay (2 items)<br>9. Performance-based pay (2 items)<br><br>*Operationalization: Employee's perceptions of the extent to which their employer made a commitment or obligation to them with regard to these the inducements (1 = not at all; 5 = to a great extent)* | |
| 14. Kickul (2001a) | 23 items representing 5 dimensions<br>1. Autonomy and growth (9 items)<br>2. Benefits (4 items)<br>3. Rewards and opportunities (5 items)<br>4. Job security and work responsibilities (3 items)<br>5. Work facilitation (2 items)<br><br>*Operationalization: Employees' perceptions of obligations that the organization has promised to them explicitly or implicitly: dichotomous measure (1 = yes; 0 = no)* | |
| 15. Kickul (2001b) | 26 items aggregated into one scale<br>*Examples:*<br>- Career guidance and mentoring<br>- Competitive salary<br>- Meaningful work<br><br>*Operationalization: Employees' perceptions of obligations that the organization has promised to them explicitly or implicitly: dichotomous measure (1 = yes; 0 = no)* | |
| 16. Lewis-McClear & Taylor (1998) | | 18 items (no information on contents)<br><br>*Operationalization: Employees' and supervisors' perception of the extent to which the employee is obligated these contributions to the organization* |

| AUTHORS | EMPLOYER INDUCEMENTS | EMPLOYEE CONTRIBUTIONS |
|---|---|---|
| 17. Robinson (1996) | 7 items<br>1. Promotion<br>2. High pay<br>3. Pay based on current level of performance<br>4. Training<br>5. Long-term job security<br>6. Career development<br>7. Sufficient power and responsibility<br><br>*Operationalization: Employees' perceptions of the extent to which their employer is obligated to provide them with these inducements based on implicit or explicit promises or understanding (1 = not at all obligated; 5 = very obligated)* | |
| 18. Robinson & Morrison (1995) | 6 items representing 2 dimensions:<br>*Transactional obligations* ($\alpha$ = .59)<br>8. Promotion<br>9. High pay<br>10. Pay based on current level of performance<br>*Relational obligations* ($\alpha$ = .57)<br>11. Training<br>12. Long-term job security<br>13. Career development<br><br>*Operationalization: Employees' perceptions of the how explicitly their employer has promised each of the inducements (1 = very implicit; 5 = very explicit)* | |
| 19. Robinson, Kraatz & Rousseau (1994)<br>20. Rousseau (1990)<br>21. Shore & Barksdale (1998) | 7 items<br>1. Promotion<br>2. High pay<br>3. Pay based on current level of performance<br>4. Training<br>5. Long-term job security<br>6. Career development<br>7. Support with personal problems<br><br>*Operationalization: Employees' perceptions of the extent to which their employer is obligated to provide them with these inducements and the extent to which they are obligated to provide their employer with these contributions (1 = not at all; 5 = very highly)* | 8 items<br>1. Working extra hours<br>2. Loyalty<br>3. Volunteering to do non-required tasks on the job<br>4. Advance noting if taking a job elsewhere<br>5. Willingness to accept a transfer<br>6. Protection of proprietary information<br>7. Minimum stay of 2 years |
| 22. Rousseau & Tijoriwala (1999) | | Items representing two dimensions (no info on specific number and content of items)<br>1. Relational ($\alpha$ = .82)<br>2. Transactional ($\alpha$ = .83)<br><br>*Operationalization: Employees' beliefs about the extent to which they had committed to engage in specific behaviors as part of their employment with the organization (1 = not at all; 5 = to a very great extent)* |
| 23. Tinsley & Lee (1999) | | 33 items representing 3 dimensions of obligations of team members<br>1. Transactional ($\alpha$ = .73 / 72)<br>2. Relational ($\alpha$ = .82 / 74)<br>3. Teamplayer ($\alpha$ = .79 / 77)<br><br>*Operationalization: Employees' perceptions about the obligations they expect from their group and the obligations they have to the group* |

| AUTHORS | EMPLOYER INDUCEMENTS | EMPLOYEE CONTRIBUTIONS |
|---|---|---|
| 24. Schalk & Huiskamp (2001) | 10 items, aggregated into one scale<br>1. Candid and fair treatment<br>2. Open and direct communication<br>3. Competitive salary<br>4. Respect<br>5. Training and education<br>6. Good work climate<br>7. Job and income security<br>8. A challenging and stimulating job<br>9. Opportunities for promotion<br>10. Bonuses based on performance | 10 items, aggregated into one scale<br>1. Deliver good work in terms of quantity and quality<br>2. Protect confidential information<br>3. Deliver a good service<br>4. Work well with others<br>5. Work extra hours if needed<br>6. Volunteer to do non-required tasks if needed<br>7. Not support the organization's competitors<br>8. Advance notice if taking a job elsewhere<br>9. Willingness to accept an internal transfer<br>10. Willingness to accept a transfer to another region |
| | *Operationalization: Employees' perceptions of the extent to which their employer is obligated to provide them with these inducements and the extent to which they are obligated to provide their employer with these contributions* | |
| 25. Thomas & Anderson (1998) | 7 items<br>1. career prospects<br>2. job security<br>3. job satisfaction<br>4. social/leisure aspects<br>5. pay<br>6. effects on family<br>7. accommodation | |
| | *Operationalization: Employees' perceptions of the extent to which they expect each of these inducements to be poor or good* | |

# Appendix 2.2
# Overview of Operationalizations of Psychological Contract Features

Table A2.2: Overview of Dimensions, Items and Instructions Used to Assess the Features of the Psychological Contract.

| AUTHORS | DIMENSIONS | SAMPLE ITEMS |
|---|---|---|
| 1. De Meuse; Bergmann & Lester (2001) | Relational<br>17 items (α .91 - .93) | Mutual trust<br>Openly communicate with each other<br>Understanding for each other's needs<br>Willingness to "go the extra mile"<br>Loyalty to each other |
| | *Operationalization: employees' perceptions of the extent to which these elements are present in the employment relationship (1 = not at all; 5 = in very large amounts)* | |
| 2. Freese, Heinen & Schalk (1999)<br>3. Freese & Schalk (1996; 1999);<br>4. Schalk, Freese & Van den Bosch (1996) | One scale (relational vs transactional)<br>8 items referring to tangibility, focus, and stability<br>(no information on α-reliability) | My work is only a small part of my life<br>My duties and what is expected from me often change<br>My obligations towards this organization are clear and specific<br>My work has a strong impact upon my life |
| | *Operationalization: extent to which employees agree with each of the statements (1 = not at all; 5 = fully agree)* | |
| 5. Millward & Hopkins (1998);<br>6. Millward & Brewerton (1999) | Transactional:<br>20 items (α = .80 - .88) | I do this job just for the money<br>I come to work purely to get the job done<br>My commitment to this organization is defined by my contract<br>I only carry out what is necessary to get the job done |
| | Relational:<br>11 items (α = .84 - .86) | I expect to develop my skills in this company<br>I expect to grow in this organization<br>I feel part of a team in this organization<br>My job means more to me than just a means of paying the bills |
| | *Operationalization: extent to which employees agree with each of the statements* | |

| AUTHORS | DIMENSIONS | SAMPLE ITEMS |
|---|---|---|
| 7. Van den Brande (2002);<br>8. Janssens *et al.* (2002);<br>9. Sels *et al.* (2002) | Time frame<br>I: long-term involvement: 7 items (α = .82)<br>C: loyalty: 3 items (α = .76) | I: Employment security<br>I: Opportunities for career development<br>C: Long-term commitment<br>C: Accept a transfer |
| | Tangibility<br>I: tangibility: 6 items (α = .86)<br>C: open attitude: 4 items (α = .79) | I: Agreements set down in writing<br>I: Make specific agreements<br>C: Clearly state what is important to me in my work<br>C: Clearly indicate if problems arise |
| | Scope<br>I: personal treatment: 5 items (α = .84)<br>C: personal investment: 5 items (α = .85) | I: Appreciate me for what I am<br>I: Treat me as a person<br>C: Work extra hours when necessary<br>C: Bring own ideas and creativity |
| | Stability<br>I: carefulness of arrangements: 3 items (α = .70)<br>C: flexibility: 5 items (α = .85) | I: Be flexible regarding arrangements<br>I: Consider arrangements as permanently valid<br>C: Adjust easily to changes<br>C: Deal with unpredictable events |
| | Power distance<br>I: power distance: 2 items (α = .58)<br>C: respect for authority: 4 items (α = .79) | I: Differential benefits to superiors and subordinates<br>I: Allow managers to decide for their subordinates<br>C: Show respect for supervisors<br>C: Adopt a formal attitude to superiors |
| | Individualization<br>I: equal treatment: 4 items (α = .85)<br>C: individualization: 2 items (α = .49) | I: Treat all employees at the same level equally<br>I: Apply equal benefits to employees at the same level<br>C: Individual demands<br>C: individual arrangements |
| | *(I = Inducements; C = Contributions)* | |
| | *Operationalization: Statements expressing expectations of employees concerning their entitlements (inducements) and their obligations (contributions)(1 = entirely disagree; 5= entirely agree)* | |

# Appendix 2.3
# Overview of Definitions and Operationalizations of Psychological Contract Evaluation

Table A2.3: Overview of Definitions, Operationalizations and Dimensions of the Evaluative Facet of the Psychological Contract

| Authors | Definition of Evaluation | Operationalization of Evaluation | Dimensions[1] |
|---|---|---|---|
| 1. Cassar (2001) | Perceived fulfillment of promises by failing to comply with the terms of the psychological contract | Employees' perceptions of the extent to which employer has failed to fulfil or is failing to fulfill a list of inducements | Specific: 7 items, analyzed separately |
| 2. Conway (1999) | state of the psychological contract:<br>1. Kept promises | Four dimensions:<br>1. Extent to which the organization has kept its promises and commitments to the employee | 1. 2 subdimensions:<br>1.1 specific (7 items reflecting aspects at work ) $\alpha = .74; .82; .77; .80$<br>1.2 global (4 items assessing promise fulfillment $\alpha = .81; .78; .84; .79$ |
| | 2. Benefits received | 2. How much the organization actually provides a list of benefits | 2. 3 subdimensions:<br>2.1 Advancement benefits (3 items) $\alpha = .83; .85; .60; .68$<br>2.2 Consideration benefits (6 items) $\alpha = .78; .81; .70; .72$<br>2.3 Organizational support (5 items) $\alpha = .86; .85; 84; .87$ |
| | 3. Fulfilled obligations | 3. How much employees believe the organization provides compared with what it should provide a list of benefits | 3. 2 subdimensions<br>3.1 Fulfillment advancement obligations (3 items) $\alpha = .82; .83; .65; .70$<br>3.2 Fulfillment consideration obligations (6 items) $\alpha = .81; .80; .65; .48$ |
| | 4. Equity | 4.1 Perceived equity: Overall evaluation of how good your deal is (better than the organization or worse than the organization)<br>4.2 Return on special efforts: Extent to which organization rewards occasions where employee goes beyond job requirements formal<br>4.3 Favorable external comparisons: Evaluations of how well off employees consider their work considered with external others | 4. 3 subdimensions<br>4.1 6 items; $\alpha = .81; .76; .69; 79$<br>4.2 6 items; $\alpha = .84; .75; .83; .91$<br>4.3 3 items; $\alpha = .78; .80; .69; .65$ |

| Authors | Definition of Evaluation | Operationalization of Evaluation | Dimensions |
|---|---|---|---|
| 3. Coyle-Shapiro (2001a) | Breach of employer and employee obligations | Managers' perceptions of the extent to which employees in practice are provided with inducements | Specific: commensurate with content measures (cf. Table A2.1)<br><br>Employer obligations: 14 items; T1 $\alpha = .86$; T2 $\alpha = .89$<br><br>Employee obligations: 10 items; T1 $\alpha = .89$; T2 $\alpha = .89$ |
| 4. Coyle-Shapiro (2001b) | Perceived breach of employer obligations | Employees' perceptions of the extent to which they in practice have been provided with inducements; subtracted from perceived obligations → discrepancy measure | Specific: 14 items commensurate with content measure (cf. Table A2.1);<br>T1 $\alpha = .87$; T2 $\alpha = .88$ |
| 5. Colye-Shapiro & Kessler (1998) | Perceived fulfillment of employer and employee obligations | Employees' and managers' perceptions of the extent to which the employer and the employee have fulfilled their obligations in practice | Specific: commensurate with content measure (cf. Table A2.1)<br><br>Employer obligations: 8 items; 2 dimensions (transactional, relational)<br><br>Employee obligations: 11 items; 2 dimensions (in-job, extra-role)<br>No information on $\alpha$-reliabilities |
| 6. Colye-Shapiro & Kessler (2000a) | Perceived fulfillment of employer and employee obligations | Employees' perceptions of the extent to which they in practice have been provided with inducements and in practice have fulfilled their obligations | Specific: commensurate with content measures; Identical to Coyle-Shapiro & Kessler (1998)<br><br>Employer obligations: 8 items; 2 dimensions<br>1. Transactional, $\alpha = .85$<br>2. Relational, $\alpha = .65$<br><br>Employee obligations: 8 items; 2 dimensions:<br>1. In-job, $\alpha = .80$<br>2. Relational, $\alpha = .82$ |
| 7. Colye-Shapiro & Kessler (2000b) | Perceived fulfillment of employer and employee obligations<br><br>Perceived breach of employer obligations | Employees' perceptions of the extent to which the organization employer fulfils its obligations (x importance) and employees' and managers' perceptions of extent to which employees in practice fulfill their obligations<br><br>Employees' and managers' perceptions of the extent to which the organization in practice provides inducements; employees' perceptions are subtracted from their perceptions of obligations → discrepancy measure (x importance) | Specific; commensurate with content measures (cf. Table A2.1)<br><br>Employer obligations: 8 items; 2 dimensions (Identical to Coyle-Shapiro & Kessler, 1998)<br><br>1. Transactional; $\alpha = .87$ for fulfillment scale<br>2. Relational, $\alpha = .71$ for fulfillment scale<br><br>Employee obligations: 12 items aggregated into 1 scale; $\alpha = .85$ |

| Authors | Definition of Evaluation | Operationalization of Evaluation | Dimensions |
|---|---|---|---|
| 8. Colye-Shapiro & Kessler (2000c) | Perceived fulfillment of employer obligations<br><br>Perceived breach of employer obligations | Employees' perceptions of the extent to which their employer has fulfilled its obligations<br><br>Employees' and managers' perceptions of the extent to which the organization in practice provides obligations. employees' perceptions are subtracted from their perceptions of obligations → discrepancy measure | Specific: commensurate with content measures (cf. Table A2.1)<br>9 items representing 3 dimensions<br>2. Transactional; fulfillment: $\alpha$ = .88, provided: $\alpha$ = .85<br>3. Training; fulfillment: $\alpha$ = .91; provided: $\alpha$ = .81<br>4. Relational; fulfillment: $\alpha$ = .62; provided: $\alpha$ = .53 |
| 9. Coyle-Shapiro & Kessler (2002) | Employer inducements received | Employees' perceptions of the extent to which their employer provides them a list of inducements | Specific: commensurate with content measures (cf. Table A2.1)<br>14 items aggregated into one scale; $\alpha$ = .84 |
| 10. Freese & Schalk (1996)<br><br>11. Schalk; Freese & Van den Bosch (1996) | Violation by the organization | Employees' perceptions of the extent to inducements were sufficiently provided by the organization; subtracted from their perceptions of what the organization should provide → discrepancy measure (dichotomous measures) | Specific: commensurate with content measures (cf. Table A2.1)<br>37 items representing 5 content dimensions<br>1. Job content; $\alpha$ = .71<br>2. Development: $\alpha$ = .61<br>3. Social aspects: $\alpha$ = .67<br>4. HRM policy: $\alpha$ = .82<br>5. Rewards: $\alpha$ = .80<br>$\alpha$-reliabilities based upon difference scores |
| 12. Freese & Schalk (1999) | Employer obligations provided<br><br>Perceived violation of employer obligations | Extent to which inducements received are more or less than expected<br><br>Extent to which the level of inducements received compared to expectations is acceptable or not (dichotomous measure) | Specific: 43 items representing 5 dimensions but aggregated into one scale ($\alpha$ = .94) |
| 13. Freese, Heinen & Schalk (1999) | Perceived fulfillment of employer obligations<br><br>Perceived violation of employer obligations | Extent to which inducements received are more or less than expected<br><br>Extent to which the level of inducements received compared to expectations is acceptable or not | Specific |
| 14. Guest & Conway (2000; 2002) | Delivery of employer promises | Managers' perceptions of the extent to which promises or commitments to provide inducements have been kept by the organization | Specific: 13 items aggregated into 1 scale; $\alpha$ = .86 |

| AUTHORS | DEFINITION OF EVALUATION | OPERATIONALIZATION OF EVALUATION | DIMENSIONS |
|---|---|---|---|
| 15. Guzzo, Noonan & Elron (1994) | Evaluation of employer obligations | Employees' perceptions of the extent to which practices are being provided by their employer<br><br>Employees' perceptions of the extent to which what is being provided differs from what they thought should be provided | 43 items representing 3 dimensions – commensurate measures for both types of evaluation measures<br><br>1. Financial inducements (18 items); $\alpha = .64$ / $\alpha = .81$<br>2. General support (18 items); $\alpha = .73$ / $\alpha = .81$<br>3. Family-oriented support (7 items); $\alpha = .60$ / $\alpha = .72$<br>Overall score: $\alpha = .84$ / $\alpha = .91$ |
| 16. Ho (1999) | Receipt of benefits<br><br>Fulfillment versus breach of obligations | Employees' perceptions of the extent to which they had received inducements<br><br>Employees' perceptions of the extent to which their employer has delivered what it promised | 9 single items referring to the 9 dimensions used to measure content of the psychological contract (cf. Table A2.1), representing 3 dimensions:<br>1. Job elements (4 items); $\alpha = .82$ / $\alpha = .83$<br>2. Relational elements (3 items); $\alpha = .92$ / $\alpha = .73$<br>3. Transactional elements (2 items); $\alpha = .63$ / .79<br>Commensurate items for both measures of evaluation |
| 17. Kickul (2001a) | Fulfillment of employer promises | Extent to which organization has fulfilled promises about obligations that were promised | Specific: 23 items commensurate with content, aggregated into 5 dimensions (cf. Table A2.1):<br>1. Autonomy and growth (9 items); $\alpha = .85$<br>2. Benefits (4 items); $\alpha = .81$<br>3. Rewards and opportunities (5 items); $\alpha = .74$<br>4. Work facilitation (2 items); $\alpha = .72$ |
| 18. Kickul (2001b) | Fulfillment of employer promises | Extent to which organization has fulfilled promises about obligations that were promised | Specific: 26 items commensurate with content, aggregated into one scale (cf. Table A2.1); $\alpha = .90$ |
| 19. Larwood, Wright, Desrochers & Dahir (1998) | Violation by the organization | Extent to which job corresponds with expectation and extent to which organization has lived up to promises | Global: 3 items aggregated into one scale; $\alpha = .75$ |

| AUTHORS | DEFINITION OF EVALUATION | OPERATIONALIZATION OF EVALUATION | DIMENSIONS |
|---|---|---|---|
| 20. Lester, Turnley, Bloodgood & Bolino (2002) | Fulfillment of employer promises | The amount the employee actually receives compared to the amount that the organization had promised to provide them | 18 items focusing on 6 content areas but aggregated into 1 composite scale<br>1. Benefits (2 items)<br>2. Pay (3 items)<br>3. Advancement opportunities (3 items)<br>4. The work itself (4 items)<br>5. Resource support (2 items)<br>6. Good employment relationship (4 items)<br>$\alpha = .89$ for subordinate scale and $\alpha = .90$ for supervisor scale |
| 21. Lewis-McClear & Taylor (1997) | Contract violation by the employee | Extent to which managers perceive that the employee violated his/her obligations to the organization | Global: 2 items aggregated into one scale; no info on $\alpha$-reliability |
| 22. Lewis-McClear & Taylor (1998) | Employee breach | Extent to which managers perceive that the employee failed to meet his/her obligations to the organization | Global: 2 items aggregated into one scale; $\alpha = .71$ |
| | Organization breach | Extent to which employees perceive that their organization fails to meet its obligations to the employee | Global: 4 items aggregated into one scale; $\alpha = .68$ |
| 23. Porter, Pearce, Tripoli & Lewis (1998) | Gap between employees' and employers' perceptions of inducements offered | Extent to which employees and managers perceive that inducements are actually being offered by the organization | 9 items representing 3 dimensions but aggregated into 1 scale (no info on $\alpha$-reliability)<br>1. Rewards for performance (2 items)<br>2. Career growth opportunities (3 items)<br>3. Commitment to employees (4 items) |
| 24. Robinson (1996) | Breach of promised employer obligations | Extent to which the employer fulfils the promises about employer obligations that were made initially; subtracted from perceived obligations → discrepancy measure | Specific: 7 items commensurate with content measure (cf. Table A2.1); discrepancy at item-level aggregated into 1 scale; $\alpha = .78$ |
| 25. Robinson & Morrison (1994) | Violation of employer obligations | Extent to which the employer fulfils its promises | Specific: 6 items commensurate with content measure (cf. Table A2.1); 2 dimensions<br>1. Transactional (3 items); $\alpha = .78$<br>2. Relational (3 items); $\alpha = .75$ |

| Authors | Definition of Evaluation | Operationalization of Evaluation | Dimensions |
|---|---|---|---|
| 26. Robinson & Morrison (2000) | Violation by the employer | Statements to assess level of felt violation (e.g. I feel betrayed by my organization) | Global: 4 items; $\alpha = .92$ |
| | Breach by the employer | Statements to assess evaluation of fulfillment of the contract by the employer (e.g. Almost all promises have been kept thus far) | Global: 5 items; $\alpha = .92$ |
| 27. Robinson, Kraatz & Rousseau (1994) | Violation of employer obligations | Extent to which employer fulfils its obligations | Specific: 7 items commensurate with content measure (cf. Table A2.1); analyses at item-level |
| 28. Robinson & Rousseau (1994) | Violation of promised employer obligations | Extent to which the employer fulfils the promised obligations that they owed the employee | Global: 1 continuous measure<br>Global: 1 dichotomous measure |
| 29. ten Brink, den Hartog, Koopman & van Muijen (1999) | Perceived fulfillment of expectations | Employees' perceptions of the degree to which their expectations are met by the organization | Specific: 28 items referring to<br>1. Tasks (3 items)<br>2. Development opportunities (3 items)<br>3. Identification (3 items)<br>4. Participation (3 items)<br>5. Autonomy (3 items)<br>6. Stable employment relationship (2 items)<br>7. Functional mobility (4 items)<br>8. Work-life balance (5 items)<br>9. Information (2 items)<br>All items aggregated into one scale; $\alpha = .93$ |
| 30. Tinsley & Lee (1999) | Perceived breach of obligations | Employees' perceptions of the degree to which other group members have fulfilled their obligations; subtracted from perceived obligations → discrepancy measure | Specific: commensurate to content measure (cf. Table A2.1)<br>33 items representing 3 dimensions:<br>1. Transactional; $\alpha = .86 / .82$<br>2. Relational: $\alpha = .86 / .85$<br>3. Teamplayer: $\alpha = .84 / .79$ |
| 31. Turnley & Feldman (1998) | Perceived violation of employer promises | Employees' perceptions of the extent to which they receive more or less inducements than what was promised | Specific: 16 items, only 5 items used in structural analyses (which were most frequently violated after restructuring):<br>1. Job security<br>2. Decision input<br>3. Advancement<br>4. Health benefits<br>5. Responsibility<br>Global: 4 items aggregated into one scale; $\alpha = .86$ |

| AUTHORS | DEFINITION OF EVALUATION | OPERATIONALIZATION OF EVALUATION | DIMENSIONS |
|---|---|---|---|
| 32. Turnley & Feldman (1999) | Perceived violation of employer promises | 1. Employees' perceptions of the amount they of each inducement they actually receive compared to the amount that the organization had committed to provide them x importance of inducement | Specific: 16 items, aggregated into one scale (no α-reliability info) |
| | | 2. Overall level of violation experienced | Global: 1 item |
| 33. Turnley & Feldman (2000) | Perceived violation of employer promises | 1. Employees' perceptions of the amount they of each inducement they actually receive compared to the amount that the organization had committed to provide them | Specific: 16 items, aggregated into one scale; α = .83 |
| | | 2. Overall level of violation experienced | Global: 1 item |

[1]Global measures = without content specification; Specific measures = with reference to content dimensions

# Appendix 2.4
# Overview of Empirical Findings on the Relationship between the Psychological Contract and Work-Related Attitudes and Behaviors

Table A2.4: Overview of Empirical Findings regarding the Relationship between Employees' Psychological Contract Evaluations and Work-Related Attitudes and Behaviors.

| | Authors | Sample | Psychological Contract Measurement | Major findings |
|---|---|---|---|---|
| 1. | Cassar (2001) | 132 public sector employees | Survey; self-reports on psychological contract violations by the organization | Perceived violation was negatively related to satisfaction, commitment and trust.<br>Different relationships among different items comprising psychological contract violation and outcomes |
| 2. | Conway & Briner (2000; 2002) | 45 employees | Daily diary reports on transgressions : broken & exceeded implicit & explicit organizational promises | Broken promises were related to daily mood (depression and anxiety) and to feelings of betrayal and hurt and to both constructive and destructive behaviors.<br>Exceeded promises were related to enthusiasm and to feelings of self-worth, cared for and surprise, and to both indirect and reciprocating repayment behaviors.<br>Moderating role of explicitness and importance of promise: Stronger effects for broken promises on daily mood but stronger effects for exceeded promises on emotional and behavioral reactions |
| 3. | Coyle-Shapiro (2001b) | 462 public sector employees | Two-wave longitudinal survey (2,5 year time span); self-reports on employer provided compared with what is obligated | Positive impact of fulfillment of employer obligations on feelings of perceived organizational support, loyalty and civic virtue behavior |
| 4. | Coyle-Shapiro & Kessler (1998) | 703 managers 6953 employees from public sector organization | Survey; self-reports on perceived employer and employee obligations and fulfillment of obligations | Positive relationship between perceived fulfillment of relational employer obligations and employees' perceived in-job and extra-role obligations and fulfillment of these obligations.<br>No significant effect of perceived fulfillment of transactional employer obligations on employee obligations and negative effect on employee contract behavior (as perceived by managers).<br>Negative effect of importance of transactional obligations on extra-role obligations and contract behavior.<br>Positive effect of importance of relational obligations on employee obligations and contract behavior |
| 5. | Coyle-Shaprio & Kessler (2000a) | 1400 public sector employees | Two-wave longitudinal survey (2,5 year time span); self-reports on perceived employer and employee obligations and actual inducements / contributions | Stronger positive impact of actual employer inducements than of perceived employer obligations on employee contributions, organizational citizenship behavior and obligations<br>Moderating role of exchange ideology |

| | Authors | Sample | Psychological Contract Measurement | Major findings |
|---|---|---|---|---|
| 6. | Coyle-Shaprio & Kessler (2000b) | 338 managers 1209 employees at from public sector firm | Two-wave longitudinal survey (2,5 year time span); self-reports on perceived employer and employee obligations, their importance, actual inducements and contributions, and perceived fulfillment of obligations | Perceived transactional and relational contract fulfillment by the organization leads to increased employee obligations.<br>Relational contract fulfillment by the organization leads to employee fulfillment of obligations.<br>Organization contract breach is negatively related to perceived employee obligations and fulfillment of obligations.<br>Relationships are stronger when perceived employer control is high and procedural justice is low. |
| 7. | Coyle-Shaprio & Kessler (2000c) | 703 managers and 6953 employees | Survey; self-reports on perceived employer and employee obligations and actual inducements | Positive relationship between perceived employer contract fulfillment and perceived organizational support, commitment, and willingness to engage in organizational citizenship behaviors.<br>Both effects of direct measure of fulfillment and discrepancy measure (provided – obligation) are significant |
| 8. | Coyle-Shaprio & Kessler (2002) | 6953 employees | Survey; self-reports on perceived employer and employee obligations and actual inducements | Positive relationship between perceived employer inducements and organizational citizenship behaviors.<br>Effects are stronger for contingent employees than for permanent employees. |
| 9. | Freese, Heinen & Schalk (1999) | 119 employees from one healthcare organization | Two-wave longitudinal survey; self-reports on degree of fulfillment and importance of fulfillment of employer and employee obligations (discrepancy measure) before and after organizational change | Perceived violation of employer obligations is correlated with a transactional psychological contract and is positively related to intent to turnover and to a negative evaluation of the relationship with the organization (*only correlations)* |
| 10. | Freese & Schalk (1996)<br>11. Schalk, Freese & Van den Bosch (1995) | 338 employees from 6 healthcare, recreation, education institutions | Survey; self-reports on degree of fulfillment and importance of fulfillment of employer obligations (discrepancy measure) | Perceived fulfillment was positively related to commitment and to identification with the organization.<br>Perceived breach was positively related to intention to leave the organization.<br>No significant relationship between psychological contract evaluation and absenteeism was found |
| 12. | Guest *et al.* (1996) | 1000 Employees (UK national representative sample) | Survey containing self-report measurements of degree of fulfillment of employee obligations compared to *promises* and commitments made | Negative impact of perceived psychological contract breach on job satisfaction and organizational commitment. No impact on organizational citizenship behavior or motivation. Impact of psychological contract fulfillment on overall positive perception of employment relationship |

| | Authors | Sample | Psychological Contract Measurement | Major findings |
|---|---|---|---|---|
| 13. | Guest & Conway (1997) | 1000 Employees (UK national representative sample) | Survey containing self-report measurements of degree of fulfillment of employee obligations compared to *promises* and commitments made | Negative impact of perceived psychological contract breach on job satisfaction, organizational commitment, perceived security and positive impact on feelings of pressure at work. And intention to turnover. Motivation is associated with a positive psychological contract. No impact of psychological contract evaluation on organizational citizenship behavior or absenteeism |
| 14. | Guest & Conway (1998) | 1000 Employees (UK national representative sample) | Survey containing self-report measurements of degree of fulfillment of employee obligations compared to *promises* and commitments made | Negative impact of perceived psychological contract breach on job satisfaction, organizational commitment, perceived security. Positive impact of perceived fulfillment on assessment of employee-management relations, satisfaction and motivation. No impact on organizational citizenship behavior. Impact of poor psychological contract on intention to leave |
| 15. | Guest & Conway (2000; 2002) | 1306 senior managers from diverse organizations | Survey; self-reports on promises made to employees and on delivery of promises | Positive relationship between organization's delivery of promises and managers' reports of positive employee relations, employee performance, commitment, trust, innovations and organizational citizenship behavior and negative relationship with turnover (relations found after controlling for HR-practices) |
| 16. | Guest, Mackenzie Davey & Patch (1998) | 417 employees of IT services company | Survey containing self-report measurements of degree of fulfillment of employee obligations compared to *promises* and commitments made | Negative impact of perceived psychological contract breach on organizational commitment and motivation and on the improvement-contribution component of organizational citizenship behavior |
| 17. | Guest, Mackenzie Davey & Patch (1999) | 205 employees | Survey containing self-report measurements of degree of fulfillment of employee obligations compared to *promises* and commitments made | Positive impact of perceived psychological contract fulfillment on intrinsic motivation and on knowledge sharing |
| 18. | Guzzo, Noonan & Elron. (1994) | 143 expatriate managers from different organizations | Survey; self-reports on fulfillment of employer obligations compared with what subjects felt they should receive | Perceived psychological contract fulfillment is positively related to perceived organizational support.<br>Perceived psychological contract is indirectly related to organizational commitment and negatively related to intent to quit and intent to return early from expatriation (mediating role of perceived organizational support). |
| 19. | Kickul (2001a) | 151 employees from small business organizations | Survey; self-report measures of fulfillment of employer promises about four categories of inducements | Perceived breach of promises relating to autonomy & growth and to rewards & opportunities has significant positive impact on negative affect and intentions to leave and negative impact on commitment.<br>Breach of promises relating to job security and work responsibilities only affects negative affect.<br>No effects of breach of promises relating to benefits. |

| | Authors | Sample | Psychological Contract Measurement | Major findings |
|---|---|---|---|---|
| 20. | Kickul (2001b) | 322 employees (MBA-students) 156 supervisors | Survey; self-report measures of fulfillment of employer promises and procedural & interactional justice | Perceived psychological contract breach, together with perceptions of unfair procedures and treatment leads to negative affect and deviant work behavior (the latter evaluated by the supervisor) |
| 21. | Larwood, Wright, Desrochers & Dahir (1998) | 260 employees from 17 different organizations | Survey; self-reports on perceived violation of the psychological contract by the employer | Positive evaluation of the psychological contract is positively related to job satisfaction and negatively related to interest in political behavior and intent to turnover.<br>Job satisfaction partially mediates the relationship between psychological contract evaluation and intent to turnover. |
| 22. | Lester, Turnley, Bloodgood & Bolino. (2002) | 134 dyads employees (MBA-students)-supervisors | Survey; self-report measures of fulfillment of employer obligations compared with promises | Perceived psychological contract breach leads to decreased commitment and decreased performance (the latter as evaluated by the supervisor) |
| 23. | Lewis-McLear & Taylor (1997) | 85 matched pairs of supervisors and employees from 1 public sector organization | Global evaluation of degree of fulfillment of employer obligations (survey with self-report measures) | Negative relationship of perceived psychological contract breach by the employee and employee organizational citizenship behavior (altruism, courtesy, civic virtue and conscientiousness) and with performance rating made by the supervisor.<br>Positive relationship with anti-citizenship behavior |
| 24. | Lewis-McLear & Taylor (1998) | 651 employees and 359 managers of a public sector organization | Survey (self-report measures): global evaluation of degree of fulfillment of employee and organization obligations | Organization breach was positively related to employee breach.<br>Negative impact of employee breach on organizational citizenship behaviors and on performance ratings and positive impact of employee breach and anti-citizenship behaviors (outcome variables evaluated by the supervisor) |
| 25. | Robinson (1996) | 125 employees (MBA-alumni) | Three-wave longitudinal survey (30 month time span); self reports of perceived fulfillment of employer obligations compared with promises made and importance of obligations | Psychological contract breach (T2) was negatively related to self-reported performance, civic virtue, and intentions to remain with the organization (T3).<br>Positive relationship between psychological contract breach (T2) and actual turnover (between T2 and T3).<br>Mediating role of unmet expectations and trust (T3) |
| 26. | Robinson & Morrison (1995) | 126 employees (MBA-alumni) | Three-wave longitudinal survey (30 month time span); self reports of perceived fulfillment of employer obligations | Perceived violation of transactional and of relational obligations (T2) are negatively related to trust and civic virtue behavior (T3)<br>No moderating influence of explicitness of promises (T1).<br>Mediating role of trust (T3) for violation of relational obligations. |

| Authors | Sample | Psychological Contract Measurement | Major findings |
|---|---|---|---|
| 27. Robinson, Kraatz & Rousseau (1994) | 96 employees (MBA-alumni) | Two-wave longitudinal Survey (2 year time span) self-report measurement of employer and employee obligations and of perceived fulfillment of employer obligations | Violation (T1) resulted in a decrease in perceived employee transactional and relational obligations (T2).<br>Stronger relationships between violation of relational employer obligations and changes in employee relational obligations than between violation of transactional employer obligations and changes in transactional employee obligations |
| 28. Robinson & Rousseau (1994) | 128 employees (MBA alumni) | Two-wave longitudinal survey (follow up of Rousseau, 1990); two-year time span; self-report measures of violation of promises | Perceived violation at T2 correlated negatively with trust, satisfaction and intention to stay with the organization.<br>Perceived violation at T2 correlated positively with actual turnover.<br>Careerism moderated the relationship between violation and trust (stronger for high careerists) |
| 29. Ten Brink *et al.* (1999) | 527 employees of one healthcare organization | Survey (self-report measures): evaluation of employer psychological contract fulfillment compared with expectations | Positive relationship between psychological contract fulfillment and normative and affective commitment |
| 30. Tinsley & Lee (1999) | 279 business students | Survey (self-report measures at two occasions): perception of degree of psychological contract fulfillment of work group obligations compared with perceived obligations (discrepancy measure) | Perceived breach of transactional obligations (T1) led to lower performance at T1 and T2.<br>Perceived breach was negatively related to satisfaction (T1 & T2) and positively related to a decrease in perceived personal obligations at T2 |
| 31. Turnley & Feldman (1998) | 541 managers | Survey (self-report measures) of fulfillment of employer obligations compared with promises | Positive impact of perceived violation on intention to turnover and to actual job search behavior.<br>Negative impact on loyalty, affective commitment and organizational citizenship behavior.<br>No differences in neglect and voice responses.<br>Mitigating effects of procedural justice, projection of future violation and quality of working relationships. |
| 32. Turnley & Feldman (1999) | 800 managers | Survey (self-report measures) of fulfillment of employer obligations compared with promises | Perceived psychological contract violation led to increased levels of voice, exit, and neglect behaviors and to decreased levels of loyalty to the organization.<br>Moderating role of procedural justice, availability of alternatives and of justification. |
| 33. Turnley & Feldman (2000) | 800 managers | Survey (self-report measures) of fulfillment of employer obligations compared with promises | Perceived psychological contract violation led to increased levels intention to quit and neglect and decreased extra-role behaviors.<br>Mediating role of job dissatisfaction (partial mediator for impact on intention to quit and extra-role behavior and full mediator for impact on neglect)<br>Partially mediating role of met expectations. |

# Appendix 8.1
# Longitudinal Measurement Invariance Tests

---

Table A8.1.1: Model Fit Indices for Longitudinal Measurement Invariance Tests: Promissory Beliefs (T1, T3, T4)

| Model specification[1] | $\chi^2$ | df | $\chi^2$/df | Model comparison | $\Delta\chi^2$ | $\Delta$df | TLI | CFI | RMSEA |
|---|---|---|---|---|---|---|---|---|---|
| **CAREER DEVELOPMENT** | | | | | | | | | |
| M1: *Configural invariance* | 21.170 | 15 | 1.411 | | | | .998 | .999 | .035 |
| M2: *Factorial invariance* | 22.500 | 19 | 1.184 | 1 vs. 2 | 1.330 | 4 | .999 | .999 | .024 |
| **JOB CONTENT** | | | | | | | | | |
| M1: *Configural invariance* | 113.782* | 39 | 2.917 | | | | .989 | .995 | .076 |
| M2P: *Factorial invariance*[2] | 118.946* | 43 | 2.766 | 1 vs. 2B | 5.164 | 4 | .990 | .994 | .073 |
| **SOCIAL ATMOSPHERE** | | | | | | | | | |
| M1: *Configural invariance* | 97.207* | 39 | 2.490 | | | | .991 | .996 | .067 |
| M2: *Factorial invariance* | 104.289* | 45 | 2.318 | 1 vs. 2 | 7.182 | 6 | .992 | .995 | .063 |
| **FINANCIAL REWARDS** | | | | | | | | | |
| M1: *Configural invariance* | 76.559* | 39 | 1.923 | | | | .993 | .996 | .054 |
| M2: *Factorial invariance* | 80.515* | 45 | 1.789 | 1 vs. 2 | 3.956 | 6 | .994 | .997 | .049 |
| **WORK-LIFE BALANCE** | | | | | | | | | |
| M1: *Configural invariance* | 59.677* | 39 | 1.530 | | | | .996 | .998 | .040 |
| M2P: *Factorial invariance*[3] | 65.627* | 44 | 1.492 | 1 vs. 2B | 5.950 | 5 | .997 | .998 | .038 |
| **IN- & EXTRA ROLE BEHAVIOR** | | | | | | | | | |
| M1: *Configural invariance* | 278.842* | 114 | 2.466 | | | | .988 | .992 | .066 |
| M2P: *Factorial invariance*[4] | 292.328* | 123 | 2.383 | 1 vs. 2B | 13.486 | 9 | .988 | .991 | .064 |
| **FLEXIBILITY** | | | | | | | | | |
| M1: *Configural invariance* | 56.794* | 39 | 1.456 | | | | .996 | .998 | .037 |
| M2: *Factorial invariance* | 64.408* | 45 | 1.431 | 1 vs. 2 | 7.614 | 6 | .996 | .998 | .036 |
| **LOYALTY** | | | | | | | | | |
| M1: *Configural invariance* | 17.150 | 15 | 1.143 | | | | .999 | .999 | .021 |
| M2P: *Factorial invariance*[5] | 19.428 | 17 | 1.143 | 1 vs. 2B | 2.278 | 2 | .999 | .999 | .021 |
| **ETHICAL BEHAVIOR** | | | | | | | | | |
| M1: *Configural invariance* | 76.050 | 39 | 1.950 | | | | .994 | .997 | .053 |
| M2: *Factorial invariance* | 89.354 | 45 | 1.986 | 1 vs. 2 | 13.304 | 6 | .994 | .996 | .054 |

* $p < .05$

[1] For the employability dimension of employee contributions measurement equivalence could not be tested because this scale only consists of 2 items

[2] T1 and T4 all factor loadings constrained – T3 only item 10 constrained (items 2, 7 and 20 freely estimated)

[3] T1 and T4 all factor loadings constrained – T3 only items 15 and 17 constrained (12 and 22 freely estimated)

[4] T3 and T4 all factor loadings constrained – T1 items 3, 7, 8 and 19 constrained (2 and 10 freely estimated)

[5] Only item 16 constrained (14 and 23 freely estimated)

Table A8.1.2: Model Fit Indices for Longitudinal Measurement Invariance Tests: Actual Experiences (T2, T3, T4)

| Model specification | $\chi^2$ | df | $\chi^2$/df | Model comparison | $\Delta\chi^2$ | $\Delta$df | TLI | CFI | RMSEA |
|---|---|---|---|---|---|---|---|---|---|
| **CAREER DEVELOPMENT** | | | | | | | | | |
| M1: *Configural invariance* | 20.659 | 15 | 1.377 | | | | .998 | .999 | .034 |
| M2: *Factorial invariance* | 27.396 | 19 | 1.442 | 2 vs. 1 | 6.737 | 4 | .998 | .999 | .036 |
| **JOB CONTENT** | | | | | | | | | |
| M1: *Configural invariance* | 133.856* | 39 | 3.432 | | | | .986 | .993 | .086 |
| M2: *Factorial invariance* | 145?107* | 45 | 3.225 | 2 vs. 1 | 11.251 | 6 | .988 | .993 | .082 |
| **SOCIAL ATMOSPHERE** | | | | | | | | | |
| M1: *Configural invariance* | 76.733* | 39 | 1.968 | | | | .995 | .998 | .054 |
| M2P: *Factorial invariance*[2] | 83.332* | 44 | 1.894 | 2 vs. 1 | 6.599 | 5 | .995 | .997 | .052 |
| **FINANCIAL REWARDS** | | | | | | | | | |
| M1: *Configural invariance* | 71.805* | 39 | 1.841 | | | | .993 | .996 | .050 |
| M2P: *Factorial invariance*[3] | 77.092* | 44 | 1.752 | 2 vs. 1 | 5.287 | 5 | .994 | .996 | .048 |
| **WORK-LIFE BALANCE** | | | | | | | | | |
| M1: *Configural invariance* | 65.000* | 39 | 1.667 | | | | .996 | .997 | .045 |
| M2: *Factorial invariance* | 70.627* | 45 | 1.570 | 2 vs. 1 | 5.628 | 6 | .997 | .998 | .041 |
| **IN & EXTRA ROLE BEHAVIOR** | | | | | | | | | |
| M1: *Configural invariance* | 275.723* | 114 | 2.419 | | | | .990 | .993 | .065 |
| M2: *Factorial invariance* | 292.927* | 124 | 2.362 | 2 vs. 1 | 17.203 | 10 | .991 | .993 | .064 |
| **FLEXIBILITY** | | | | | | | | | |
| M1: *Configural invariance* | 66.136* | 39 | 1.969 | | | | .995 | .997 | .046 |
| M2: *Factorial invariance* | 76.758* | 45 | 1.706 | 2 vs. 1 | 10.622 | 6 | .995 | .997 | .046 |
| **LOYALTY** | | | | | | | | | |
| M1: *Configural invariance* | 48.587* | 15 | 3.239 | | | | .987 | .996 | .082 |
| M2: *Factorial invariance* | 53.481* | 18 | 2.971 | 2 vs. 1 | 4.894 | 3 | .989 | .996 | .077 |
| **RESPECT** | | | | | | | | | |
| M1: *Configural invariance* | 61.569* | 39 | 1.579 | | | | .997 | .999 | .042 |
| M2: *Factorial invariance* | 66.154* | 45 | 1.470 | 2 vs. 1 | 4.584 | 6 | .998 | .999 | .038 |

* $p < .05$

[1] For the employability dimension of employee contributions measurement equivalence could not be tested because this scale only consists of 2 items

[2] T2 and T4 all factor loadings constrained. T3 only items 9 and 25 constrained (item 4 = 1, item 13 freely estimated)

[3] T2 and T4 all factor loadings constrained. T3 only items 18 and 23 constrained (item 11= 1, item 16 freely estimated)

Table A8.1.3: Model Fit Indices for Longitudinal Measurement Invariance Tests: Perceived Fulfillment of Promises (T2, T3, T4)

| Model specification | $\chi^2$ | df | $\chi^2$/df | Model comparison | $\Delta\chi^2$ | Δdf | TLI | CFI | RMSEA |
|---|---|---|---|---|---|---|---|---|---|
| **CAREER DEVELOPMENT** | | | | | | | | | |
| M1: *Configural invariance* | 17.972 | 15 | 1.198 | | | | .999 | 1.000 | .024 |
| M2: *Factorial invariance* | 26.911 | 19 | 1.416 | 2 vs. 1 | 8.939 | 4 | .997 | .999 | .035 |
| **JOB CONTENT** | | | | | | | | | |
| M1: *Configural invariance* | 133.635 | 39 | 3.427 | | | | .984 | .992 | .085 |
| M2P: *Factorial invariance*[2] | 138.609 | 43 | 3.223 | 2 vs. 1 | 4.974 | 4 | .985 | .992 | .082 |
| **SOCIAL ATMOSPHERE** | | | | | | | | | |
| M1: *Configural invariance* | 64.239 | 39 | 1.647 | | | | .996 | .998 | .044 |
| M2P: *Factorial invariance*[3] | 67.257 | 44 | 1.529 | 2 vs. 1 | 3.018 | 5 | .997 | .998 | .040 |
| **FINANCIAL REWARDS** | | | | | | | | | |
| M1: *Configural invariance* | 70.702 | 39 | 1.813 | | | | .990 | .995 | .049 |
| M2: *Factorial invariance* | 77.750 | 45 | 1.728 | 2 vs. 1 | 7.049 | 6 | .991 | .995 | .047 |
| **WORK-LIFE BALANCE** | | | | | | | | | |
| M1: *Configural invariance* | 74.559 | 39 | 1.912 | | | | .994 | .997 | .052 |
| M2: *Factorial invariance* | 76.854 | 45 | 1.708 | 2 vs. 1 | 2.296 | 6 | .995 | .997 | .046 |
| **IN & EXTRA ROLE BEHAVIOR** | | | | | | | | | |
| M1: *Configural invariance* | 287.185 | 114 | 2.519 | | | | .989 | .992 | .068 |
| M2: *Factorial invariance* | 298.065 | 124 | 2.404 | 2 vs. 1 | 10.881 | 10 | .989 | .992 | .065 |
| **FLEXIBILITY** | | | | | | | | | |
| M1: *Configural invariance* | 85.645 | 39 | 2.196 | | | | .990 | .995 | .060 |
| M2: *Factorial invariance* | 96.302 | 45 | 2.140 | 2 vs. 1 | 10.657 | 6 | .990 | .994 | .059 |
| **LOYALTY** | | | | | | | | | |
| M1: *Configural invariance* | 24.953 | 15 | 1.664 | | | | .995 | .998 | .045 |
| M2: *Factorial invariance* | 28.072 | 19 | 1.477 | 2 vs. 1 | 3.118 | 4 | .996 | .998 | .038 |
| **RESPECT** | | | | | | | | | |
| M1: *Configural invariance* | 88.996 | 39 | 2.282 | | | | .994 | .997 | .062 |
| M2: *Factorial invariance* | 99.408 | 45 | 2.209 | 2 vs. 1 | 10.413 | 6 | .994 | .997 | .060 |

* $p < .05$

[1] For the employability dimension of employee contributions measurement equivalence could not be tested because this scale only consists of 2 items

[2] T1 and T4 all items constrained; T3 only item 10 constrained (item 2 = 1, items 7 and 20 freely estimated)

[3] T1 and T3 all items constrained; T4 only items 9 and 25 constrained (item 4 = 1, item 13 freely estimated)

Table A8.1.4: Model Fit Indices for Longitudinal Measurement Invariance Tests: Information Seeking (T1, T2, T3, T4)

| Model specification | $\chi^2$ | df | $\chi^2$/df | Model comparison | $\Delta\chi^2$ | $\Delta$df | TLI | CFI | RMSEA |
|---|---|---|---|---|---|---|---|---|---|
| **CAREER DEVELOPMENT** | | | | | | | | | |
| M1: *Configural invariance* | 133.607 | 74 | 1.805 | | | | .990 | .994 | .049 |
| M2: *Factorial invariance* | 150.683 | 83 | 1.815 | 2 vs. 1 | 17.076 | 9 | .989 | .994 | .050 |
| **JOB CONTENT** | | | | | | | | | |
| M1: *Configural invariance* | 67.981 | 74 | .919 | | | | 1.001 | 1.000 | .000 |
| M2: *Factorial invariance* | 76.029 | 83 | .916 | 2 vs. 1 | 8.048 | 9 | 1.001 | 1.000 | .000 |
| **SOCIAL ATMOSPHERE** | | | | | | | | | |
| M1: *Configural invariance* | 83.050 | 74 | 1.122 | | | | .998 | .999 | .019 |
| M2: *Factorial invariance* | 97.394 | 83 | 1.173 | 2 vs. 1 | 14.344 | 9 | .998 | .999 | .023 |
| **FINANCIAL REWARDS** | | | | | | | | | |
| M1: *Configural invariance* | 100.388 | 74 | 1.357 | | | | .995 | .997 | .033 |
| M2P: *Factorial invariance*[1] | 109.612 | 83 | 1.387 | 2 vs. 1 | 9.224 | 5 | .995 | .997 | .034 |
| **WORK-LIFE BALANCE** | | | | | | | | | |
| M1: *Configural invariance* | 93.922 | 74 | 1.269 | | | | .997 | .998 | .028 |
| M2P: *Factorial invariance*[2] | 102.723 | 82 | 1.253 | 2 vs. 1 | 8.801 | 8 | .997 | .998 | .028 |
| **IN & EXTRA ROLE BEHAVIOR** | | | | | | | | | |
| M1: *Configural invariance* | 100.183 | 74 | 1.354 | | | | .996 | .998 | .033 |
| M2: *Factorial invariance* | 112.820 | 83 | 1.359 | 2 vs. 1 | 12.637 | 9 | .996 | .998 | .033 |
| **FLEXIBILITY** | | | | | | | | | |
| M1: *Configural invariance* | 137.975 | 74 | 1.865 | | | | .989 | .994 | .051 |
| M2: *Factorial invariance* | 150.933 | 83 | 1.818 | 2 vs. 1 | 12.958 | 9 | .990 | .994 | .050 |
| **LOYALTY** | | | | | | | | | |
| M1: *Configural invariance* | 94.590 | 74 | 1.278 | | | | .996 | .998 | .029 |
| M2: *Factorial invariance* | 108.598 | 83 | 1.308 | 2 vs. 1 | 14.009 | 9 | .996 | .998 | .030 |
| **RESPECT** | | | | | | | | | |
| M1: *Configural invariance* | 107.879 | 74 | 1.458 | | | | .994 | .997 | .037 |
| M2: *Factorial invariance* | 119.013 | 83 | 1.434 | 2 vs. 1 | 11.134 | 9 | .995 | .997 | .036 |
| **EMPLOYABILITY** | | | | | | | | | |
| M1: *Configural invariance* | 78.996 | 74 | 1.458 | | | | .999 | 1.000 | .000 |
| M2: *Factorial invariance* | 94.195 | 83 | 1.434 | 2 vs. 1 | 15.198 | 9 | .998 | .999 | .000 |

* $p < .05$

[1] T1 all items constrained, T2 item 1 freely estimated, T3 item 2 freely estimated, T4 items 1 and 3 freely estimated

[2] T2, T3 and T4 all items constrained; T1 item 1 freely estimated

# Appendix 8.2
# Bivariate Correlations between Measures Included in the Longitudinal Analyses

---

Table A8.2.1: Cross-Sectional Bivariate Correlations between Variable Measured at T1

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. OP Career development | | | | | | | | | | | | | | | | | | | | | |
| 2. OP Job content | .38 | | | | | | | | | | | | | | | | | | | | |
| 3. OP Social atmosphere | .16 | .34 | | | | | | | | | | | | | | | | | | | |
| 4. OP Financial rewards | .32 | .23 | .32 | | | | | | | | | | | | | | | | | | |
| 5. OP Work-life balance | .10 | .17 | .32 | .41 | | | | | | | | | | | | | | | | | |
| 6. OP total | .56 | .63 | .70 | .70 | .65 | | | | | | | | | | | | | | | | |
| 7. EP Role behavior | .12 | .32 | .53 | .29 | .32 | .51 | | | | | | | | | | | | | | | |
| 8. EP Flexibility | .13 | .25 | .21 | .23 | .12 | .29 | .44 | | | | | | | | | | | | | | |
| 9. EP Loyalty | .04 | .13 | .28 | .22 | .24 | .29 | .42 | .44 | | | | | | | | | | | | | |
| 10. EP Ethical behavior | .19 | .17 | .34 | .19 | .25 | .36 | .57 | .36 | .36 | | | | | | | | | | | | |
| 11. EP Employability | .01 | .09 | .11 | .01 | .14 | .12 | .34 | .37 | .37 | .37 | | | | | | | | | | | |
| 12. EP total | .14 | .29 | .44 | .29 | .31 | .47 | .82 | .72 | .69 | .76 | .61 | | | | | | | | | | |
| 13. IS career development | .12 | .06 | .21 | .20 | .15 | .24 | .17 | .19 | .20 | .15 | .08 | .22 | | | | | | | | | |
| 14. IS Job content | .01 | .09 | .17 | .06 | .14 | .15 | .11 | .13 | .11 | .10 | .06 | .15 | .38 | | | | | | | | |
| 15. IS Social atmosphere | .05 | .16 | .25 | .13 | .10 | .22 | .28 | .28 | .19 | .11 | .13 | .29 | .40 | .48 | | | | | | | |
| 16. IS Financial rewards | .04 | .08 | .17 | .16 | .08 | .16 | .15 | .21 | .08 | .08 | -.01 | .16 | .46 | .24 | .33 | | | | | | |
| 17. IS Work-life balance | .02 | .08 | .22 | .13 | .15 | .20 | .23 | .17 | .15 | .17 | .11 | .23 | .38 | .34 | .50 | .47 | | | | | |
| 18. IS Role behavior | .13 | .28 | .20 | .12 | .09 | .25 | .31 | .31 | .20 | .20 | .22 | .36 | .46 | .47 | .62 | .36 | .53 | | | | |
| 19. IS Flexibility | .04 | .21 | .19 | .05 | .12 | .19 | .33 | .28 | .28 | .20 | .24 | .38 | .45 | .34 | .51 | .34 | .50 | .70 | | | |
| 20. IS Loyalty | .03 | .06 | .18 | .08 | .15 | .16 | .20 | .19 | .26 | .21 | .15 | .27 | .47 | .26 | .32 | .40 | .40 | .39 | .49 | | |
| 21. IS Ethical behavior | .00 | .18 | .19 | .08 | .09 | .17 | .21 | .20 | .17 | .24 | .21 | .27 | .38 | .25 | .43 | .32 | .53 | .54 | .56 | .47 | |
| 22. IS Employability | .11 | .15 | .14 | .19 | .15 | .23 | .28 | .25 | .19 | .18 | .26 | .32 | .44 | .42 | .49 | .35 | .45 | .68 | .60 | .40 | .48 |

$N = 333$

Correlations > .11, $p < .05$; correlations > .14, $p < .01$; correlations > .19, $p < .001$

OP = Organizational Promises; EP = Employee Promises; IS = Information Seeking

Table A8.2.2: Cross-Sectional Bivariate Correlations between Variables Measured at T2

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. OI Career development | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. OI Job content | .46 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3. OI Social atmosphere | .30 | .31 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4. OI Financial rewards | .36 | .29 | .16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5. OI Work-life balance | .20 | .19 | .33 | .23 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6. OI Total | .68 | .70 | .65 | .62 | .60 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7. EC Role behavior | .15 | .30 | .45 | .11 | .17 | .35 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8. EC Flexibility | .11 | .26 | .03 | .13 | -.12 | .12 | .19 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9. EC Loyalty | .17 | .28 | .18 | .18 | .18 | .31 | .22 | .20 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10. EC Ethical behavior | .19 | .17 | .19 | .05 | .08 | .20 | .48 | .17 | .38 | | | | | | | | | | | | | | | | | | | | | | | | |
| 11. EC Employability | -.07 | -.06 | -.09 | .06 | .10 | -.01 | .10 | .12 | .08 | .06 | | | | | | | | | | | | | | | | | | | | | | | |
| 12. EC Total | .17 | .32 | .25 | .19 | .12 | .33 | .64 | .64 | .64 | .64 | .42 | | | | | | | | | | | | | | | | | | | | | | |
| 13. OF Career development | .62 | .46 | .34 | .27 | .19 | .56 | .18 | .11 | .32 | .28 | -.06 | .26 | | | | | | | | | | | | | | | | | | | | | |
| 14. OF Job content | .39 | .74 | .26 | .25 | .15 | .56 | .20 | .22 | .27 | .16 | -.09 | .26 | .62 | | | | | | | | | | | | | | | | | | | | |
| 15. OF Social atmosphere | .25 | .28 | .76 | .12 | .22 | .50 | .31 | .03 | .17 | .09 | -.09 | .17 | .48 | .40 | | | | | | | | | | | | | | | | | | | |
| 16. OF Financial rewards | .24 | .25 | .13 | .50 | .17 | .39 | .06 | .03 | .17 | .08 | .01 | .11 | .39 | .33 | .13 | | | | | | | | | | | | | | | | | | |
| 17. OF Work-life balance | .07 | .15 | .32 | .06 | .71 | .41 | .16 | -.15 | .12 | .05 | .08 | .07 | .25 | .24 | .36 | .21 | | | | | | | | | | | | | | | | | |
| 18. OF Total | .37 | .53 | .55 | .29 | .44 | .69 | .26 | .05 | .28 | .17 | -.06 | .23 | .75 | .76 | .73 | .51 | .64 | | | | | | | | | | | | | | | | |
| 19. EF Role behavior | .07 | .19 | .29 | .05 | .04 | .20 | .58 | .10 | .12 | .32 | .00 | .36 | .26 | .29 | .37 | .13 | .19 | .36 | | | | | | | | | | | | | | | |
| 20. EF Flexibility | .02 | .09 | .03 | .00 | -.08 | .03 | .25 | .45 | .19 | .26 | .05 | .42 | .18 | .17 | .04 | .11 | -.01 | .14 | .36 | | | | | | | | | | | | | | |
| 21. EF Loyalty | .22 | .19 | .19 | .20 | .13 | .27 | .20 | .12 | .63 | .33 | .00 | .42 | .36 | .30 | .25 | .26 | .15 | .37 | .33 | .32 | | | | | | | | | | | | | |
| 22. EF Ethical behavior | .12 | .08 | .11 | .10 | .08 | .15 | .30 | .16 | .17 | .52 | .03 | .37 | .28 | .19 | .21 | .12 | .11 | .24 | .55 | .29 | .50 | | | | | | | | | | | | |
| 23. EF Employability | -.01 | -.02 | .03 | -.08 | .13 | .02 | .22 | .04 | .13 | .23 | .67 | .36 | .11 | .00 | .06 | .08 | .16 | .11 | .20 | .31 | .27 | .23 | | | | | | | | | | | |
| 24. EF Total | .10 | .18 | .22 | .07 | .07 | .20 | .50 | .26 | .29 | .45 | .08 | .52 | .33 | .30 | .30 | .19 | .19 | .37 | .82 | .68 | .66 | .72 | .44 | | | | | | | | | | |
| 25. IS career development | .11 | .00 | .05 | .14 | -.04 | .05 | .08 | .09 | -.02 | -.02 | .05 | .07 | .07 | -.01 | .04 | .00 | -.05 | -.01 | .11 | .09 | .02 | .04 | -.02 | .09 | | | | | | | | |
| 26. IS Job content | .12 | .14 | .10 | .07 | .06 | .15 | .14 | .06 | .03 | .05 | .05 | .10 | .10 | .08 | .10 | -.03 | .00 | .08 | .11 | -.02 | .02 | .07 | .05 | .07 | .41 | | | | | | | | |
| 27. IS Social atmosphere | .03 | .12 | .18 | .12 | .08 | .14 | .21 | .11 | .08 | .04 | .00 | .15 | .02 | .08 | .15 | -.03 | .04 | .09 | .11 | .09 | .06 | .02 | .02 | .12 | .52 | .48 | | | | | | | |
| 28. IS Financial rewards | -.01 | .01 | .17 | .09 | .02 | .08 | .06 | .01 | .05 | -.07 | .00 | .03 | -.09 | .01 | .13 | -.12 | -.03 | .01 | .10 | .02 | -.01 | -.03 | .02 | .05 | .47 | .26 | .46 | | | | | |
| 29. IS Work-life balance | .01 | .11 | .15 | .10 | .04 | .12 | .16 | .11 | .02 | .01 | .05 | .13 | -.01 | .05 | .11 | .01 | .00 | .05 | .09 | .04 | .00 | .02 | .00 | .08 | .45 | .28 | .57 | .54 | | | | | |

Table A8.2.2 (Continued): Cross-Sectional Bivariate Correlations between Variables Measured at T2

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30. IS Role behavior | .12 | .16 | .14 | .11 | .06 | .17 | .16 | .07 | .10 | .07 | .06 | .15 | .11 | .11 | .11 | -.01 | .03 | .10 | .12 | -.02 | .07 | .02 | .01 | .07 | .48 | .45 | .58 | .41 | .48 | | | | |
| 31. IS Flexibility | .05 | .12 | .15 | .13 | .05 | .14 | .13 | .16 | .07 | .01 | .07 | .16 | .01 | .10 | .17 | -.01 | .05 | .08 | .12 | .02 | .10 | .09 | -.01 | .11 | .56 | .38 | .56 | .48 | .58 | .63 | | | |
| 32. IS Loyalty | .00 | .01 | .09 | .07 | -.05 | .03 | .03 | .04 | .02 | -.04 | .09 | .05 | .00 | .00 | .09 | -.13 | -.05 | -.03 | .04 | -.10 | .00 | .00 | -.02 | -.01 | .52 | .29 | .50 | .45 | .51 | .48 | .55 | | |
| 33. IS Ethical behavior | .05 | .12 | .12 | .16 | .04 | .14 | .05 | .03 | .02 | .02 | .06 | .06 | .03 | .09 | .11 | -.02 | .03 | .08 | .07 | .03 | .07 | .06 | -.04 | .07 | .45 | .30 | .50 | .42 | .48 | .62 | .62 | .51 | |
| 34. IS Employability | .07 | .13 | .11 | .12 | .11 | .16 | .09 | .05 | .08 | -.01 | .13 | .11 | .06 | .08 | .12 | .00 | .03 | .08 | .05 | -.01 | .03 | .01 | .04 | .03 | .45 | .41 | .54 | .41 | .49 | .69 | .61 | .54 | .56 |

$N = 333$

Correlations > .11, $p < .05$; correlations > .14, $p < .01$; correlations > .19, $p < .001$

OI = Organizational Inducements; EC = Employee Contributions; OF = Organizational Promise Fulfillment; EF = Employee Promise Fulfillment; IS = Information Seeking

Table A8.2.3: Cross-Sectional Bivariate Correlations between Variables Measured at T3

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. OP Career development | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. OP Job content | .46 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3. OP Social atmosphere | .24 | .45 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4. OP Financial rewards | .42 | .35 | .36 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5. OP Work-life balance | .26 | .34 | .50 | .44 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6. OP total | .62 | .69 | .75 | .73 | .75 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7. EP Role behavior | .21 | .45 | .60 | .29 | .44 | .57 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8. EP Flexibility | .12 | .31 | .32 | .29 | .26 | .37 | .49 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9. EP Loyalty | .04 | .13 | .27 | .21 | .29 | .28 | .41 | .50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10. EP Ethical behavior | .26 | .29 | .36 | .26 | .41 | .45 | .57 | .34 | .36 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11. EP Employability | .15 | .25 | .23 | .16 | .38 | .34 | .37 | .51 | .48 | .31 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12. EP total | .21 | .40 | .53 | .34 | .48 | .57 | .85 | .74 | .72 | .72 | .59 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13. OI Career development | .32 | .29 | .23 | .19 | .16 | .33 | .32 | .31 | .20 | .30 | .19 | .37 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14. OI Job content | .12 | .56 | .27 | .14 | .23 | .36 | .29 | .23 | .13 | .26 | .15 | .30 | .42 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15. OI Social atmosphere | .16 | .22 | .36 | .20 | .29 | .36 | .32 | .13 | .15 | .31 | .09 | .31 | .31 | .38 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16. OI Financial rewards | .19 | .25 | .30 | .44 | .27 | .41 | .30 | .39 | .29 | .28 | .22 | .40 | .49 | .37 | .23 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17. OI Work-life balance | .09 | .14 | .14 | .18 | .60 | .35 | .20 | .11 | .14 | .21 | .29 | .23 | .11 | .26 | .32 | .20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18. OI Total | .26 | .43 | .39 | .36 | .48 | .55 | .42 | .35 | .27 | .40 | .29 | .48 | .67 | .72 | .66 | .70 | .58 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 19. EC Role behavior | .16 | .25 | .27 | .14 | .18 | .28 | .44 | .19 | .18 | .33 | .14 | .39 | .22 | .26 | .45 | .09 | .18 | .34 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20. EC Flexibility | .03 | .20 | .03 | .07 | -.07 | .06 | .08 | .52 | .13 | .06 | .20 | .24 | .16 | .24 | .02 | .18 | -.10 | .14 | .24 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 21. EC Loyalty | .14 | .19 | .10 | .14 | .14 | .20 | .16 | .18 | .37 | .15 | .26 | .28 | .12 | .26 | .21 | .17 | .16 | .27 | .29 | .25 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 22. EC Ethical behavior | .09 | .16 | .15 | .07 | .18 | .18 | .30 | .07 | .15 | .47 | .12 | .32 | .08 | .15 | .18 | -.02 | .16 | .16 | .53 | .06 | .35 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 23. EC Employability | .07 | .07 | .05 | .05 | .13 | .11 | .06 | .23 | .19 | .11 | .55 | .22 | .18 | .09 | -.01 | .11 | .15 | .16 | .15 | .29 | .23 | .15 | | | | | | | | | | | | | | | | | | | | | | | | |
| 24. EC Total | .16 | .29 | .19 | .16 | .17 | .27 | .32 | .39 | .33 | .33 | .38 | .45 | .24 | .33 | .27 | .19 | .16 | .35 | .68 | .63 | .69 | .59 | .55 | | | | | | | | | | | | | | | | | | | | | | | |
| 25. OF Career development | .27 | .32 | .17 | .11 | .15 | .28 | .27 | .19 | .10 | .24 | .05 | .26 | .63 | .41 | .34 | .37 | .14 | .54 | .17 | .06 | .12 | .11 | .00 | .14 | | | | | | | | | | | | | | | | | | | | | | |
| 26. OF Job content | .09 | .45 | .24 | .08 | .19 | .29 | .20 | .19 | .12 | .20 | .07 | .23 | .35 | .80 | .29 | .31 | .18 | .57 | .17 | .20 | .17 | .06 | .02 | .20 | .52 | | | | | | | | | | | | | | | | | | | | |
| 27. OF Social atmosphere | .11 | .18 | .34 | .16 | .19 | .29 | .26 | .17 | .17 | .28 | .03 | .28 | .34 | .34 | .79 | .28 | .20 | .56 | .31 | .03 | .11 | .07 | -.06 | .15 | .46 | .43 | | | | | | | | | | | | | | | | | | | |
| 28. OF Financial rewards | .15 | .23 | .10 | .18 | .16 | .23 | .14 | .12 | .13 | .17 | .09 | .18 | .31 | .33 | .16 | .57 | .20 | .47 | .04 | .01 | .11 | .04 | .03 | .08 | .45 | .37 | .29 | | | | | | | | | | | | | | | | | | |
| 29. OF Work-life balance | .02 | .10 | .11 | .11 | .45 | .24 | .11 | .06 | .07 | .11 | .18 | .13 | .10 | .22 | .28 | .16 | .77 | .47 | .09 | -.14 | .08 | .05 | .05 | .04 | .18 | .30 | .32 | .26 | | | | | | | | | | | | | | | | | |

Table A8.2.3 (Continued): Cross-Sectional Bivariate Correlations between Variables Measured at T3

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30. OF Total | .16 | .35 | .29 | .17 | .34 | .37 | .29 | .19 | .16 | .29 | .10 | .30 | .40 | .57 | .53 | .44 | .44 | .71 | .22 | .03 | .16 | .10 | .01 | .17 | .70 | .74 | .73 | .66 | .63 | | | | | | | | | | | | | | | | |
| 31. EF Role behavior | .04 | .18 | .24 | .09 | .01 | .16 | .28 | .16 | .11 | .21 | .01 | .25 | .16 | .16 | .27 | .12 | .00 | .21 | .59 | .21 | .16 | .29 | .05 | .41 | .22 | .25 | .39 | .10 | .12 | .31 | | | | | | | | | | | | | | | |
| 32. EF Flexibility | .02 | .10 | -.02 | .07 | -.15 | .00 | .05 | .17 | -.01 | .02 | .00 | .06 | .05 | .19 | .00 | .03 | -.07 | .05 | .25 | .46 | .07 | .09 | .14 | .34 | .05 | .25 | .07 | .03 | -.01 | .12 | .43 | | | | | | | | | | | | | | |
| 33. EF Loyalty | .03 | .08 | .12 | .13 | .05 | .12 | .07 | .06 | .30 | .15 | .10 | .17 | .06 | .26 | .16 | .23 | .14 | .25 | .27 | .23 | .60 | .28 | .11 | .49 | .16 | .19 | .17 | .22 | .14 | .25 | .41 | .31 | | | | | | | | | | | | | |
| 34. EF Ethical behavior | .00 | .05 | .14 | .14 | .04 | .11 | .16 | .11 | .11 | .37 | .04 | .22 | .07 | .08 | .10 | .11 | .03 | .12 | .32 | .10 | .14 | .56 | .06 | .35 | .05 | .10 | .18 | .08 | .10 | .17 | .54 | .32 | .44 | | | | | | | | | | | |
| 35. EF Employability | -.03 | .01 | -.06 | -.01 | .00 | -.02 | .01 | .05 | .04 | .03 | .31 | .06 | .00 | .01 | -.03 | -.02 | .11 | .02 | .25 | .23 | .12 | .22 | .68 | .44 | -.02 | .00 | -.05 | -.03 | .03 | -.01 | .26 | .40 | .24 | .27 | | | | | | | | | |
| 36. EF Total | .02 | .13 | .15 | .11 | -.03 | .11 | .19 | .14 | .13 | .24 | .04 | .22 | .12 | .20 | .19 | .12 | .02 | .19 | .52 | .32 | .25 | .40 | .15 | .52 | .16 | .25 | .28 | .11 | .11 | .28 | .83 | .71 | .66 | .73 | .49 | | | | | | | | | |
| 37. IS career development | .20 | .09 | .18 | .12 | .08 | .19 | .18 | .12 | .11 | .09 | .11 | .17 | .18 | -.02 | .08 | .15 | -.06 | .09 | .06 | .07 | -.07 | -.12 | .04 | .01 | .11 | .04 | .07 | -.05 | -.04 | .00 | .08 | -.06 | -.13 | -.09 | -.01 | -.05 | | | | | | | | |
| 38. IS Job content | .10 | .03 | .14 | .06 | .07 | .12 | .15 | .19 | .11 | .08 | .14 | .18 | .11 | .07 | .08 | .12 | .00 | .11 | .03 | .12 | .08 | -.04 | .10 | .10 | .15 | .14 | .12 | .03 | .04 | .12 | .11 | .02 | .04 | -.01 | .01 | .05 | .52 | | | | | | | |
| 39. IS Social atmosphere | .12 | .11 | .18 | .09 | .09 | .17 | .24 | .21 | .18 | .07 | .17 | .24 | .13 | .13 | .07 | .19 | .00 | .15 | .13 | .09 | .10 | -.01 | .11 | .14 | .14 | .19 | .09 | .06 | .02 | .13 | .12 | .01 | .01 | .01 | .05 | .05 | .52 | .61 | | | | | | |
| 40. IS Financial rewards | .07 | .04 | .12 | .14 | .06 | .13 | .06 | .10 | .07 | .01 | .07 | .08 | .03 | -.08 | .01 | .10 | -.01 | .01 | -.02 | .06 | -.07 | -.19 | .04 | -.04 | .02 | -.02 | .05 | -.04 | .02 | -.01 | .06 | -.01 | -.05 | -.12 | .01 | -.02 | .58 | .27 | .37 | | | | |
| 41. IS Work-life balance | .08 | .08 | .15 | .09 | .16 | .16 | .17 | .15 | .12 | .11 | .21 | .19 | .04 | .04 | .12 | .14 | .07 | .13 | .04 | .03 | -.03 | -.11 | .11 | .02 | .09 | .10 | .13 | .04 | .05 | .09 | .08 | -.05 | -.06 | -.07 | .07 | -.02 | .51 | .37 | .52 | .48 | | | | |
| 42. IS Role behavior | .11 | .15 | .18 | .11 | .18 | .21 | .29 | .24 | .19 | .17 | .23 | .30 | .11 | .16 | .13 | .21 | .10 | .22 | .11 | .12 | .04 | -.04 | .12 | .12 | .16 | .22 | .15 | .15 | .13 | .22 | .12 | .05 | .04 | -.03 | .03 | .06 | .51 | .62 | .68 | .36 | .60 | | | |
| 43. IS Flexibility | .04 | .11 | .16 | .06 | .10 | .14 | .19 | .25 | .15 | .07 | .19 | .22 | .10 | .08 | .03 | .14 | -.03 | .09 | .03 | .15 | -.01 | -.08 | .10 | .07 | .11 | .15 | .06 | -.04 | .00 | .04 | .08 | .05 | -.12 | -.10 | .00 | -.02 | .53 | .55 | .57 | .43 | .52 | .70 | | |
| 44. IS Loyalty | .08 | .04 | .12 | .13 | .06 | .12 | .16 | .23 | .22 | .09 | .11 | .22 | .10 | -.01 | -.02 | .17 | -.09 | .04 | .02 | .15 | -.09 | -.13 | .06 | .01 | .10 | .06 | -.01 | -.02 | -.09 | -.02 | .08 | -.02 | -.10 | -.10 | -.01 | -.04 | .53 | .33 | .37 | .43 | .50 | .45 | .54 | |
| 45. IS Ethical behavior | .01 | .12 | .21 | .12 | .10 | .17 | .27 | .27 | .20 | .15 | .20 | .30 | .11 | .14 | .06 | .24 | .02 | .17 | .08 | .17 | .02 | -.07 | .08 | .10 | .07 | .18 | .10 | .06 | .10 | .13 | .15 | .05 | .02 | .01 | -.01 | .08 | .42 | .42 | .52 | .41 | .58 | .64 | .60 | .61 | |
| 46. IS Employability | .07 | .08 | .15 | .18 | .18 | .19 | .22 | .24 | .18 | .12 | .29 | .27 | .03 | .04 | .07 | .18 | .12 | .14 | .03 | .11 | .07 | -.07 | .18 | .11 | -.03 | .07 | .08 | -.02 | .14 | .06 | .06 | .03 | -.05 | -.04 | .09 | .00 | .55 | .48 | .51 | .47 | .58 | .66 | .60 | .45 | .62 |

$N = 333$

Correlations > .11, $p < .05$; correlations > .14, $p < .01$; correlations > .19, $p < .001$

OP = Organizational Promises; EP = Employee Promises; OI = Organizational Inducements; EC = Employee Contributions; OF = Organizational Promise Fulfillment; EF = Employee Promise Fulfillment; IS = Information Seeking

Table A8.2.4: Cross-sectional bivariate correlations between variables measured at T4

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. OP Career development | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. OP Job content | .47 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3. OP Social atmosphere | .25 | .45 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4. OP Financial rewards | .42 | .44 | .36 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5. OP Work-life balance | .16 | .28 | .41 | .44 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6. OP total | .60 | .71 | .74 | .76 | .69 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7. EP Role behavior | .28 | .42 | .61 | .35 | .35 | .59 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8. EP Flexibility | .16 | .35 | .34 | .34 | .29 | .43 | .52 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9. EP Loyalty | .03 | .13 | .28 | .24 | .29 | .30 | .34 | .45 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10. EP Ethical behavior | .20 | .29 | .35 | .26 | .30 | .41 | .56 | .31 | .29 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11. EP Employability | .00 | .16 | .20 | .13 | .30 | .24 | .32 | .51 | .40 | .24 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12. EP total | .21 | .39 | .52 | .38 | .43 | .57 | .81 | .77 | .69 | .68 | .62 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13. OI Career development | .28 | .22 | .11 | .13 | .00 | .19 | .23 | .20 | .17 | .28 | .16 | .29 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14. OI Job content | .11 | .44 | .17 | .14 | .18 | .28 | .22 | .24 | .12 | .23 | .10 | .26 | .47 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15. OI Social atmosphere | .13 | .17 | .34 | .13 | .17 | .28 | .28 | .17 | .20 | .26 | .04 | .28 | .27 | .35 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16. OI Financial rewards | .13 | .19 | .14 | .39 | .24 | .32 | .15 | .23 | .25 | .26 | .21 | .30 | .52 | .38 | .18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17. OI Work-life balance | .07 | .13 | .15 | .19 | .59 | .34 | .18 | .12 | .13 | .20 | .18 | .22 | -.02 | .28 | .26 | .21 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18. OI Total | .22 | .34 | .28 | .30 | .38 | .43 | .32 | .29 | .27 | .38 | .21 | .41 | .66 | .74 | .62 | .71 | .55 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 19. EC Role behavior | .21 | .32 | .26 | .18 | .16 | .32 | .42 | .16 | .08 | .33 | -.02 | .31 | .13 | .34 | .49 | .09 | .22 | .39 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20. EC Flexibility | .13 | .22 | .02 | .17 | -.03 | .13 | .10 | .51 | .10 | .07 | .19 | .26 | .13 | .25 | .09 | .13 | -.06 | .16 | .22 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 21. EC Loyalty | .05 | .07 | .09 | .07 | .12 | .12 | .15 | .24 | .40 | .17 | .20 | .32 | .16 | .27 | .23 | .22 | .17 | .31 | .23 | .29 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 22. EC Ethical behavior | .12 | .22 | .10 | .11 | .14 | .19 | .24 | .13 | .11 | .51 | .06 | .30 | .14 | .30 | .27 | .17 | .25 | .34 | .54 | .21 | .36 | | | | | | | | | | | | | | | | | | | | | | | | |
| 23. EC Employability | -.05 | .08 | .03 | .04 | .13 | .07 | .11 | .27 | .20 | .12 | .58 | .31 | .01 | .05 | -.04 | .10 | .17 | .09 | .02 | .27 | .21 | .12 | | | | | | | | | | | | | | | | | | | | | | | |
| 24. EC Total | .16 | .28 | .14 | .18 | .13 | .24 | .28 | .42 | .27 | .33 | .29 | .44 | .18 | .37 | .31 | .22 | .20 | .39 | .62 | .69 | .68 | .66 | .48 | | | | | | | | | | | | | | | | | | | | | | |
| 25. OF Career development | .11 | .14 | .04 | .04 | .05 | .10 | .14 | .16 | .14 | .20 | .18 | .23 | .79 | .47 | .30 | .50 | .08 | .64 | .14 | .09 | .24 | .16 | -.01 | .18 | | | | | | | | | | | | | | | | | | | | | |
| 26. OF Job content | -.02 | .23 | .11 | .11 | .15 | .17 | .11 | .16 | .11 | .18 | .07 | .18 | .41 | .76 | .30 | .36 | .24 | .62 | .20 | .18 | .29 | .18 | .06 | .29 | .56 | | | | | | | | | | | | | | | | | | | | |
| 27. OF Social atmosphere | .04 | .08 | .28 | .08 | .12 | .19 | .18 | .10 | .18 | .23 | .01 | .21 | .22 | .26 | .81 | .16 | .19 | .50 | .38 | .04 | .16 | .21 | -.03 | .22 | .37 | .38 | | | | | | | | | | | | | | | | | | | |
| 28. OF Financial rewards | .01 | .12 | .10 | .15 | .16 | .16 | .10 | .09 | .14 | .21 | .14 | .19 | .39 | .35 | .16 | .68 | .24 | .56 | .09 | .00 | .19 | .20 | .05 | .15 | .54 | .42 | .25 | | | | | | | | | | | | | | | | | | |
| 29. OF Work-life balance | -.05 | .02 | .10 | .11 | .45 | .20 | .07 | .05 | .07 | .12 | .16 | .12 | -.04 | .18 | .23 | .16 | .82 | .43 | .15 | -.07 | .13 | .19 | .15 | .14 | .15 | .32 | .31 | .32 | | | | | | | | | | | | | | | | | |

Table A8.2.4 (Continued): Cross-Sectional Bivariate Correlations between Variables Measured at T4

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30. OF Total | .02 | .15 | .19 | .13 | .26 | .23 | .17 | .15 | .18 | .27 | .14 | .25 | .45 | .55 | .53 | .49 | .46 | .76 | .28 | .06 | .28 | .27 | .06 | .27 | .71 | .75 | .69 | .70 | .63 | | | | | | | | | | | | | | | | | | |
| 31. EF Role behavior | .06 | .15 | .21 | .11 | .07 | .17 | .25 | .12 | .14 | .16 | -.02 | .20 | .14 | .26 | .36 | .10 | .07 | .27 | .60 | .20 | .17 | .33 | .00 | .41 | .25 | .32 | .44 | .14 | .16 | .38 | | | | | | | | | | | | | | | | | |
| 32. EF Flexibility | .04 | .12 | -.04 | .08 | -.07 | .02 | .10 | .21 | .04 | .06 | .03 | .13 | .02 | .12 | .09 | .05 | -.05 | .07 | .26 | .52 | .14 | .16 | .11 | .41 | .02 | .15 | .06 | .08 | -.04 | .09 | .40 | | | | | | | | | | | | | | | | |
| 33. EF Loyalty | .04 | .10 | .09 | .14 | .08 | .13 | .12 | .22 | .32 | .12 | .12 | .26 | .24 | .27 | .21 | .16 | .09 | .29 | .23 | .28 | .61 | .31 | .14 | .49 | .29 | .31 | .22 | .18 | .14 | .34 | .34 | .42 | | | | | | | | | | | | | | | |
| 34. EF Ethical behavior | .00 | .13 | .17 | .17 | .11 | .17 | .19 | .14 | .13 | .39 | .03 | .25 | .15 | .23 | .23 | .18 | .13 | .28 | .39 | .21 | .20 | .62 | .02 | .43 | .17 | .26 | .28 | .21 | .17 | .33 | .54 | .29 | .43 | | | | | | | | | | | | | |
| 35. EF Employability | -.11 | .04 | -.01 | .08 | .12 | .04 | .07 | .15 | .03 | .10 | .32 | .16 | -.01 | .06 | -.02 | .06 | .25 | .10 | .14 | .21 | .06 | .22 | .61 | .35 | .06 | .09 | .01 | .14 | .28 | .17 | .19 | .38 | .34 | .27 | | | | | | | | | | | |
| 36. EF Total | .02 | .14 | .08 | .13 | .03 | .11 | .15 | .16 | .12 | .21 | .05 | .20 | .12 | .26 | .26 | .12 | .10 | .26 | .49 | .38 | .27 | .46 | .13 | .55 | .20 | .31 | .30 | .18 | .17 | .34 | .77 | .73 | .70 | .72 | .55 | | | | | | | | | | |
| 37. IS career development | .19 | .13 | .12 | .11 | .09 | .18 | .06 | .08 | .11 | -.06 | .14 | .08 | .12 | .01 | .05 | .04 | .00 | .07 | -.07 | .01 | -.03 | -.14 | .07 | -.05 | .06 | .04 | .09 | -.07 | -.03 | .00 | .04 | -.05 | .05 | -.07 | -.04 | -.05 | | | | | | | | | |
| 38. IS Job content | .09 | .10 | .13 | .12 | .13 | .17 | .08 | .17 | .12 | .04 | .14 | .15 | .20 | .12 | .13 | .15 | .03 | .19 | .01 | .09 | .03 | -.07 | .06 | .03 | .18 | .14 | .16 | .04 | .04 | .14 | .10 | -.02 | .04 | -.04 | .03 | .01 | .57 | | | | | | | | |
| 39. IS Social atmosphere | .07 | .13 | .13 | .14 | .16 | .18 | .11 | .14 | .20 | .04 | .15 | .18 | .18 | .12 | .09 | .13 | .06 | .18 | .01 | .02 | .05 | -.06 | .04 | .02 | .16 | .14 | .14 | .04 | .06 | .15 | .06 | -.06 | .08 | -.05 | -.03 | -.02 | .60 | .55 | | | | | | | |
| 40. IS Financial rewards | .05 | .05 | .10 | .14 | .05 | .12 | .03 | .02 | .14 | -.08 | -.02 | .03 | .03 | .04 | .14 | .03 | .01 | .07 | -.05 | -.07 | -.01 | -.20 | -.02 | -.11 | .00 | .08 | .18 | -.11 | .00 | .04 | .05 | -.08 | .07 | -.10 | -.09 | -.06 | .63 | .41 | .51 | | | | | | |
| 41. IS Work-life balance | .04 | .07 | .11 | .11 | .12 | .13 | .08 | .12 | .20 | -.01 | .09 | .13 | .14 | .10 | .16 | .12 | .01 | .16 | -.01 | -.03 | -.01 | -.09 | .02 | -.04 | .11 | .14 | .21 | .06 | .02 | .16 | .11 | -.05 | .06 | -.03 | -.05 | -.01 | .54 | .50 | .63 | .60 | | | | | | |
| 42. IS Role behavior | .08 | .14 | .10 | .13 | .14 | .17 | .12 | .14 | .19 | .01 | .16 | .17 | .15 | .14 | .13 | .15 | .09 | .20 | .05 | .07 | .03 | -.07 | .08 | .05 | .13 | .17 | .16 | .05 | .10 | .17 | .12 | .00 | .06 | -.05 | .04 | .02 | .61 | .61 | .70 | .54 | .67 | | | | | | |
| 43. IS Flexibility | .04 | .10 | .12 | .12 | .10 | .14 | .14 | .17 | .20 | .04 | .14 | .19 | .15 | .11 | .16 | .10 | -.02 | .15 | .06 | .04 | -.04 | -.10 | .01 | -.01 | .13 | .13 | .19 | -.02 | .01 | .12 | .17 | -.01 | .06 | .01 | .01 | .05 | .58 | .50 | .56 | .60 | .67 | .74 | | | | |
| 44. IS Loyalty | .09 | .06 | .08 | .11 | .04 | .11 | .04 | .14 | .17 | -.09 | .10 | .10 | .09 | .03 | .05 | .08 | -.05 | .06 | -.11 | .04 | -.02 | -.19 | -.01 | -.08 | .03 | .06 | .09 | -.03 | -.04 | .02 | .02 | -.05 | .08 | -.10 | -.10 | -.06 | .60 | .42 | .49 | .61 | .58 | .60 | .63 | | |
| 45. IS Ethical behavior | .04 | .10 | .11 | .16 | .13 | .16 | .12 | .14 | .22 | .08 | .15 | .19 | .13 | .13 | .11 | .18 | .05 | .19 | .02 | -.01 | .03 | -.05 | .02 | .00 | .08 | .15 | .15 | .06 | .06 | .14 | .07 | -.02 | .12 | .04 | .03 | .04 | .48 | .36 | .55 | .53 | .61 | .65 | .64 | .61 | | |
| 46. IS Employability | .07 | .13 | .15 | .10 | .13 | .17 | .16 | .18 | .19 | -.01 | .22 | .20 | .15 | .14 | .12 | .09 | .05 | .16 | .00 | .05 | .03 | -.12 | .11 | .03 | .08 | .16 | .16 | .01 | .07 | .13 | .09 | -.03 | .07 | -.05 | .00 | -.01 | .64 | .51 | .61 | .59 | .65 | .75 | .63 | .65 | .64 | |
| 47. Satisfaction | .01 | .09 | .11 | -.02 | .06 | .07 | .15 | .11 | .23 | .18 | .07 | .21 | .41 | .44 | .41 | .33 | .14 | .51 | .26 | .11 | .38 | .22 | .04 | .31 | .45 | .43 | .36 | .30 | .14 | .48 | .24 | .03 | .26 | .21 | .01 | .21 | -.02 | .10 | .14 | .06 | .09 | .12 | .11 | -.05 | .08 | .05 | |
| 48. Met expectations | -.10 | .02 | .07 | -.12 | .00 | -.03 | .08 | .06 | .23 | .12 | .05 | .15 | .40 | .38 | .30 | .33 | .08 | .45 | .22 | .04 | .34 | .21 | .04 | .26 | .45 | .41 | .30 | .33 | .12 | .45 | .23 | .04 | .25 | .19 | .00 | .19 | .02 | .13 | .13 | -.01 | .13 | .15 | .10 | -.02 | .11 | .08 | .76 |

$N = 333$

Correlations > .11, $p < .05$; correlations > .14, $p < .01$; correlations > .19, $p < .001$

OP = Organizational Promises; EP = Employee Promises; OI = Organizational Inducements; EC = Employee Contributions; OF = Organizational Promise Fulfillment; EF = Employee Promise Fulfillment; IS = Information Seeking

Table A8.2.5: Cross-lagged Bivariate Correlations between Measures of Promissory Beliefs (T1, T3, T4)

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Age | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. Gender | .07 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3. T1 OP Career development | -.14 | .06 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4. T1 OP Job content | .14 | .10 | .38 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5. T1 OP Social atmosphere | -.11 | -.02 | .16 | .34 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6. T1 OP Financial rewards | -.07 | .05 | .32 | .23 | .32 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7. T1 OP Work-life balance | -.07 | .08 | .10 | .17 | .32 | .41 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8. T3 OP Career development | -.24 | .03 | .58 | .20 | .16 | .29 | .08 | | | | | | | | | | | | | | | | | | | | | | | | |
| 9. T3 OP Job content | .06 | -.01 | .25 | .51 | .27 | .23 | .15 | .46 | | | | | | | | | | | | | | | | | | | | | | | |
| 10. T3 OP Social atmosphere | -.06 | -.06 | .07 | .20 | .62 | .22 | .26 | .24 | .45 | | | | | | | | | | | | | | | | | | | | | | |
| 11. T3 OP Financial rewards | -.04 | .02 | .29 | .17 | .26 | .59 | .26 | .42 | .35 | .36 | | | | | | | | | | | | | | | | | | | | | |
| 12. T3 OP Work-life balance | -.06 | .04 | .15 | .15 | .26 | .23 | .60 | .26 | .34 | .50 | .44 | | | | | | | | | | | | | | | | | | | | |
| 13. T4 OP Career development | -.20 | .03 | .55 | .18 | .13 | .24 | .03 | .61 | .31 | .12 | .30 | .15 | | | | | | | | | | | | | | | | | | | |
| 14. T4 OP Job content | .08 | .05 | .26 | .51 | .29 | .24 | .14 | .32 | .61 | .30 | .30 | .18 | .47 | | | | | | | | | | | | | | | | | | |
| 15. T4 OP Social atmosphere | -.05 | -.06 | .18 | .30 | .57 | .22 | .18 | .18 | .31 | .68 | .31 | .33 | .25 | .45 | | | | | | | | | | | | | | | | | |
| 16. T4 OP Financial rewards | .01 | .06 | .23 | .16 | .19 | .44 | .15 | .29 | .25 | .23 | .60 | .24 | .42 | .44 | .36 | | | | | | | | | | | | | | | | |
| 17. T4 OP Work-life balance | -.05 | .01 | .13 | .14 | .27 | .25 | .55 | .16 | .23 | .39 | .34 | .69 | .16 | .28 | .41 | .44 | | | | | | | | | | | | | | | |
| 18. T1 EP Role behavior | -.09 | -.09 | .12 | .32 | .53 | .29 | .32 | .16 | .30 | .46 | .23 | .29 | .15 | .31 | .44 | .21 | .29 | | | | | | | | | | | | | | |
| 19. T1 EP Flexibility | .01 | .07 | .13 | .25 | .21 | .23 | .12 | .14 | .25 | .27 | .26 | .14 | .16 | .27 | .28 | .23 | .13 | .44 | | | | | | | | | | | | | |
| 20. T1 EP Loyalty | .00 | -.06 | .04 | .13 | .28 | .22 | .24 | .10 | .17 | .23 | .19 | .22 | .09 | .10 | .21 | .13 | .16 | .42 | .44 | | | | | | | | | | | | |
| 21. T1 EP Ethical behavior | -.16 | -.03 | .19 | .17 | .34 | .19 | .25 | .21 | .21 | .32 | .16 | .25 | .18 | .21 | .33 | .16 | .28 | .57 | .36 | .36 | | | | | | | | | | | |
| 22. T1 EP Employability | -.03 | -.02 | .01 | .09 | .11 | .01 | .14 | .08 | .09 | .14 | .00 | .16 | -.03 | .06 | .11 | .07 | .15 | .34 | .37 | .37 | .37 | | | | | | | | | | |
| 23. T3 EP Role behavior | -.01 | -.11 | .15 | .22 | .43 | .22 | .24 | .21 | .45 | .60 | .29 | .44 | .14 | .32 | .46 | .20 | .31 | .61 | .37 | .36 | .44 | .24 | | | | | | | | | |
| 24. T3 EP Flexibility | .03 | .10 | .12 | .26 | .19 | .16 | .15 | .12 | .31 | .32 | .29 | .26 | .09 | .28 | .32 | .22 | .24 | .33 | .65 | .30 | .28 | .28 | .49 | | | | | | | | |
| 25. T3 EP Loyalty | -.01 | -.05 | .04 | .17 | .20 | .23 | .25 | .04 | .13 | .27 | .21 | .29 | .05 | .08 | .27 | .14 | .25 | .36 | .34 | .59 | .30 | .31 | .41 | .50 | | | | | | | |
| 26. T3 EP Ethical behavior | -.06 | -.02 | .21 | .17 | .30 | .20 | .29 | .26 | .29 | .36 | .26 | .41 | .18 | .24 | .35 | .19 | .33 | .45 | .30 | .29 | .63 | .21 | .57 | .34 | .36 | | | | | | |
| 27. T3 EP Employability | -.04 | .05 | .04 | .13 | .09 | .13 | .29 | .15 | .25 | .23 | .16 | .38 | .00 | .10 | .12 | .09 | .30 | .27 | .32 | .26 | .27 | .56 | .37 | .51 | .48 | .31 | | | | | |
| 28. T4 EP Role behavior | -.07 | -.06 | .19 | .23 | .37 | .21 | .15 | .23 | .38 | .49 | .35 | .34 | .28 | .42 | .61 | .35 | .35 | .57 | .36 | .29 | .46 | .25 | .64 | .39 | .32 | .41 | .27 | | | | |
| 29. T4 EP Flexibility | .02 | .05 | .08 | .22 | .14 | .15 | .08 | .07 | .28 | .26 | .29 | .19 | .16 | .35 | .34 | .34 | .29 | .32 | .59 | .26 | .24 | .30 | .36 | .71 | .38 | .23 | .40 | .52 | | | |

Table A8.2.5 (Continued): Cross-lagged Bivariate Correlations between Measures of Promissory Beliefs (T1, T3, T4)

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30. T4 EP Loyalty | .01 | -.04 | .00 | .17 | .17 | .14 | .18 | .03 | .13 | .25 | .21 | .26 | .03 | .13 | .28 | .24 | .29 | .35 | .35 | .60 | .27 | .32 | .36 | .40 | .64 | .29 | .29 | .34 | .45 | | |
| 31. T4 EP Ethical behavior | -.04 | -.10 | .22 | .19 | .24 | .21 | .18 | .23 | .26 | .24 | .25 | .26 | .20 | .29 | .35 | .26 | .30 | .39 | .25 | .28 | .62 | .26 | .38 | .23 | .27 | .65 | .23 | .56 | .31 | .29 | |
| 32 T4 EP Employability | .05 | .00 | .01 | .14 | .05 | -.01 | .15 | .06 | .18 | .16 | .11 | .26 | .00 | .16 | .20 | .13 | .30 | .24 | .29 | .18 | .16 | .54 | .26 | .42 | .28 | .18 | .62 | .32 | .51 | .40 | .24 |

$N = 333$

Correlations > .11, $p < .05$; correlations > .14, $p < .01$; correlations > .19, $p < .001$

OP = Organizational Promises; EP = Employee Promises

Table A8.2.6: Cross-Lagged Bivariate Correlations between Measures of Actual Experiences (T2, T3, T4)

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Age | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. Gender | -.01 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3. T2 OI Career development | -.08 | .10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4. T2 OI Job content | .05 | .09 | .52 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5. T2 OI Social atmosphere | -.13 | .02 | .32 | .35 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6. T2 OI Financial rewards | .07 | -.02 | .44 | .34 | .19 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7. T2 OI Work-life balance | .05 | .10 | .16 | .20 | .32 | .23 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8. T3 OI Career development | -.13 | .01 | .39 | .25 | .26 | .28 | .01 | | | | | | | | | | | | | | | | | | | | | | | | |
| 9. T3 OI Job content | .06 | .02 | .27 | .56 | .24 | .26 | .17 | .48 | | | | | | | | | | | | | | | | | | | | | | | |
| 10. T3 OI Social atmosphere | -.12 | -.06 | .20 | .20 | .66 | .15 | .22 | .31 | .41 | | | | | | | | | | | | | | | | | | | | | | |
| 11. T3 OI Financial rewards | -.02 | .06 | .30 | .25 | .27 | .51 | .13 | .50 | .35 | .25 | | | | | | | | | | | | | | | | | | | | | |
| 12. T3 OI Work-life balance | .03 | .12 | .07 | .06 | .18 | .12 | .58 | .08 | .25 | .33 | .21 | | | | | | | | | | | | | | | | | | | | |
| 13. T4 OI Career development | -.02 | -.02 | .36 | .23 | .18 | .23 | .01 | .48 | .25 | .14 | .38 | .00 | | | | | | | | | | | | | | | | | | | |
| 14. T4 OI Job content | .12 | .00 | .25 | .51 | .23 | .24 | .18 | .30 | .58 | .20 | .30 | .20 | .51 | | | | | | | | | | | | | | | | | | |
| 15. T4 OI Social atmosphere | -.10 | .03 | .22 | .18 | .60 | .06 | .20 | .21 | .21 | .60 | .21 | .15 | .28 | .38 | | | | | | | | | | | | | | | | | |
| 16. T4 OI Financial rewards | .06 | .01 | .25 | .25 | .18 | .47 | .17 | .29 | .24 | .08 | .56 | .11 | .53 | .39 | .22 | | | | | | | | | | | | | | | | |
| 17. T4 OI Work-life balance | .06 | .05 | .05 | .04 | .12 | .11 | .58 | .00 | .15 | .21 | .05 | .64 | .02 | .29 | .25 | .23 | | | | | | | | | | | | | | | |
| 18. T2 EC Role behavior | -.01 | -.06 | .18 | .32 | .44 | .18 | .23 | .18 | .24 | .33 | .16 | .15 | .12 | .19 | .25 | .14 | .10 | | | | | | | | | | | | | | |
| 19. T2 EC Flexibility | .13 | .05 | .14 | .23 | .00 | .18 | -.07 | .11 | .20 | -.04 | .15 | -.12 | .17 | .17 | -.02 | .11 | -.13 | .26 | | | | | | | | | | | | | |
| 20. T2 EC Loyalty | -.01 | .05 | .24 | .29 | .22 | .21 | .21 | .11 | .23 | .13 | .13 | .09 | .05 | .17 | .08 | .13 | .11 | .22 | .18 | | | | | | | | | | | | |
| 21. T2 EC Ethical behavior | .10 | -.05 | .16 | .17 | .20 | .12 | .17 | .06 | .13 | .12 | .02 | .07 | .12 | .13 | .10 | .07 | .14 | .48 | .23 | .36 | | | | | | | | | | | |
| 22. T2 EC Employability | .06 | .00 | .06 | .02 | -.03 | .17 | .14 | .13 | .06 | -.02 | .05 | .13 | -.03 | -.01 | -.09 | .05 | .12 | .14 | .22 | .14 | .12 | | | | | | | | | | |
| 23. T3 EC Role behavior | .00 | -.12 | .14 | .21 | .35 | .09 | .14 | .22 | .30 | .45 | .11 | .21 | .14 | .24 | .35 | .14 | .14 | .60 | .12 | .19 | .33 | .11 | | | | | | | | | |
| 24. T3 EC Flexibility | .16 | .06 | .14 | .22 | .04 | .12 | -.11 | .18 | .26 | .03 | .19 | -.08 | .14 | .22 | .04 | .14 | -.07 | .12 | .69 | .20 | .13 | .23 | .24 | | | | | | | | |
| 25. T3 EC Loyalty | .11 | .01 | .10 | .17 | .14 | .16 | .14 | .16 | .30 | .23 | .16 | .17 | .12 | .14 | .06 | .12 | .07 | .19 | .21 | .45 | .25 | .22 | .26 | .26 | | | | | | | |
| 26. T3 EC Ethical behavior | .14 | -.11 | .11 | .15 | .15 | .03 | .11 | .09 | .18 | .17 | .02 | .14 | .11 | .19 | .19 | .11 | .24 | .35 | .11 | .27 | .51 | .08 | .52 | .14 | .38 | | | | | | |
| 27. T3 EC Employability | .03 | .00 | .02 | .05 | .01 | .12 | .09 | .18 | .10 | .00 | .12 | .17 | .04 | .05 | -.02 | .12 | .10 | .10 | .14 | .16 | .10 | .66 | .15 | .33 | .28 | .17 | | | | | |
| 28. T4 EC Role behavior | .02 | -.10 | .16 | .21 | .29 | .08 | .17 | .19 | .22 | .37 | .09 | .13 | .18 | .38 | .50 | .11 | .24 | .51 | .07 | .12 | .29 | -.02 | .64 | .09 | .11 | .46 | .01 | | | | |
| 29. T4 EC Flexibility | .16 | .09 | .13 | .18 | .04 | .06 | -.11 | .14 | .21 | .04 | .15 | -.02 | .17 | .26 | .10 | .16 | -.01 | .16 | .59 | .16 | .14 | .17 | .23 | .75 | .17 | .10 | .25 | .25 | | | |

Table A8.2.6 (Continued): Cross-Lagged Bivariate Correlations between Measures of Actual Experiences (T2, T3, T4)

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30. T4 EC Loyalty | .08 | .02 | .16 | .19 | .14 | .16 | .16 | .14 | .17 | .12 | .17 | .17 | .19 | .29 | .25 | .20 | .15 | .10 | .11 | .43 | .23 | .05 | .20 | .22 | .47 | .20 | .16 | .27 | .30 | | |
| 31. T4 EC Ethical behavior | .16 | -.04 | .15 | .20 | .10 | .07 | .12 | .11 | .18 | .17 | .07 | .19 | .17 | .32 | .27 | .16 | .25 | .30 | .05 | .26 | .44 | .01 | .40 | .09 | .20 | .61 | .10 | .56 | .23 | .39 | |
| 32 T4 EC Employability | .01 | .00 | -.03 | .01 | -.05 | .02 | .04 | .09 | .00 | .00 | .06 | .16 | .03 | .03 | -.01 | .08 | .15 | .07 | .14 | .04 | .08 | .55 | .10 | .27 | .19 | .10 | .60 | .07 | .30 | .21 | .14 |

$N = 333$

Correlations > .11, $p < .05$; correlations > .14, $p < .01$; correlations > .19, $p < .001$

OI = Organizational Inducements; EC = Employee Contributions

Table A8.2.7: Cross-Lagged Bivariate Correlations between Measures of Perceived Promise Fulfillment (T2, T3, T4)

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Age | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. Gender | -.01 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3. T2 OF Career development | -.08 | .11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4. T2 OF Job content | .05 | .11 | .65 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5. T2 OF Social atmosphere | -.12 | .02 | .47 | .44 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6. T2 OF Financial rewards | .08 | .01 | .39 | .34 | .15 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7. T2 OF Work-life balance | .10 | .10 | .25 | .29 | .35 | .27 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8. T3 OF Career development | -.06 | .04 | .47 | .36 | .30 | .28 | .22 | | | | | | | | | | | | | | | | | | | | | | | | |
| 9. T3 OF Job content | .02 | .01 | .40 | .56 | .31 | .17 | .28 | .57 | | | | | | | | | | | | | | | | | | | | | | | |
| 10. T3 OF Social atmosphere | -.13 | .03 | .32 | .27 | .63 | .10 | .26 | .44 | .46 | | | | | | | | | | | | | | | | | | | | | | |
| 11. T3 OF Financial rewards | .03 | .09 | .32 | .28 | .21 | .48 | .22 | .47 | .39 | .31 | | | | | | | | | | | | | | | | | | | | | |
| 12. T3 OF Work-life balance | .03 | .17 | .10 | .12 | .16 | .13 | .60 | .20 | .29 | .34 | .31 | | | | | | | | | | | | | | | | | | | | |
| 13. T4 OF Career development | -.02 | .04 | .33 | .30 | .30 | .35 | .17 | .45 | .27 | .31 | .43 | .08 | | | | | | | | | | | | | | | | | | | |
| 14. T4 OF Job content | .04 | .06 | .30 | .48 | .28 | .30 | .32 | .28 | .48 | .30 | .34 | .22 | .57 | | | | | | | | | | | | | | | | | | |
| 15. T4 OF Social atmosphere | -.14 | .03 | .25 | .20 | .57 | .09 | .27 | .21 | .17 | .65 | .19 | .16 | .36 | .41 | | | | | | | | | | | | | | | | | |
| 16. T4 OF Financial rewards | .07 | .01 | .29 | .22 | .14 | .38 | .23 | .27 | .17 | .17 | .51 | .17 | .52 | .40 | .23 | | | | | | | | | | | | | | | | |
| 17. T4 OF Work-life balance | .04 | .09 | .08 | .04 | .10 | .09 | .53 | .04 | .08 | .17 | .10 | .57 | .20 | .36 | .31 | .32 | | | | | | | | | | | | | | | |
| 18. T2 EF Role behavior | -.01 | .01 | .23 | .28 | .39 | .15 | .23 | .17 | .20 | .27 | .09 | .08 | .12 | .24 | .28 | .07 | .09 | | | | | | | | | | | | | | |
| 19. T2 EF Flexibility | .02 | .01 | .23 | .20 | .09 | .16 | .10 | .08 | .09 | -.04 | .04 | -.06 | .01 | .10 | -.01 | -.03 | -.04 | .41 | | | | | | | | | | | | | |
| 20. T2 EF Loyalty | .05 | .11 | .32 | .33 | .26 | .24 | .19 | .19 | .14 | .10 | .15 | .13 | .23 | .19 | .12 | .26 | .06 | .30 | .30 | | | | | | | | | | | | |
| 21. T2 EF Ethical behavior | .09 | -.01 | .20 | .17 | .21 | .14 | .16 | .05 | .09 | .17 | .05 | .06 | .10 | .16 | .12 | .08 | .10 | .55 | .34 | .41 | | | | | | | | | | | |
| 22. T2 EF Employability | .05 | .05 | .19 | .07 | .09 | .14 | .21 | .10 | .00 | -.07 | .02 | .10 | -.01 | .01 | .00 | .05 | .09 | .21 | .35 | .31 | .20 | | | | | | | | | | |
| 23. T3 EF Role behavior | -.03 | .00 | .17 | .20 | .29 | -.01 | .16 | .23 | .26 | .40 | .14 | .18 | .13 | .20 | .31 | .05 | .04 | .54 | .22 | .19 | .34 | .16 | | | | | | | | | |
| 24. T3 EF Flexibility | .12 | .01 | .08 | .16 | .06 | .05 | .13 | .11 | .25 | .09 | .09 | .06 | .03 | .12 | .03 | -.02 | -.03 | .25 | .40 | .20 | .22 | .13 | .38 | | | | | | | | |
| 25. T3 EF Loyalty | .13 | .04 | .17 | .14 | .15 | .16 | .19 | .20 | .25 | .19 | .26 | .22 | .10 | .12 | .11 | .08 | .06 | .24 | .16 | .40 | .28 | .12 | .32 | .37 | | | | | | | |
| 26. T3 EF Ethical behavior | .05 | .00 | .18 | .10 | .11 | .08 | .11 | .07 | .08 | .15 | .09 | .16 | .05 | .16 | .25 | .06 | .14 | .27 | .14 | .25 | .46 | .12 | .52 | .29 | .36 | | | | | | |
| 27. T3 EF Employability | .09 | -.02 | -.02 | .00 | .03 | .03 | .19 | .05 | .07 | -.02 | .09 | .14 | -.06 | -.03 | -.06 | -.03 | .09 | .21 | .26 | .06 | .22 | .56 | .27 | .42 | .33 | .29 | | | | | |
| 28. T4 EF Role behavior | -.01 | -.07 | .25 | .22 | .26 | .08 | .19 | .12 | .17 | .26 | .08 | .00 | .25 | .33 | .45 | .12 | .17 | .54 | .23 | .19 | .28 | .09 | .57 | .24 | .11 | .40 | .14 | | | | |
| 29. T4 EF Flexibility | -.01 | -.02 | .08 | .15 | .08 | .08 | .06 | .02 | .17 | .03 | .11 | -.01 | .05 | .18 | .10 | .11 | .01 | .23 | .39 | .14 | .18 | .13 | .31 | .57 | .21 | .22 | .37 | .39 | | | |

Table A8.2.7 (Continued): Cross-Lagged Bivariate Correlations between Measures of Perceived Promise Fulfillment (T2, T3, T4)

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30. T4 EF Loyalty | .06 | .03 | .21 | .19 | .20 | .12 | .20 | .24 | .25 | .21 | .21 | .13 | .27 | .30 | .29 | .15 | .10 | .22 | .19 | .36 | .19 | .11 | .29 | .35 | .45 | .25 | .18 | .37 | .41 | | |
| 31. T4 EF Ethical behavior | .14 | -.05 | .21 | .17 | .17 | .15 | .17 | .06 | .11 | .20 | .14 | .07 | .19 | .27 | .26 | .16 | .17 | .28 | .15 | .27 | .40 | .08 | .38 | .22 | .30 | .57 | .18 | .58 | .28 | .43 | |
| 32 T4 EF Employability | .07 | -.02 | .03 | -.03 | .04 | -.03 | .18 | .03 | -.07 | -.03 | -.02 | .11 | .11 | .12 | .07 | .14 | .24 | .15 | .13 | .07 | .14 | .34 | .16 | .21 | .14 | .17 | .45 | .27 | .41 | .34 | .34 |

$N = 333$

Correlations > .11, $p < .05$; correlations > .14, $p < .01$; correlations > .19, $p < .001$

OF = Organizational Promise Fulfillment; EF = Employee Promise Fulfillment

Table A8.2.8: Cross-Lagged Bivariate Correlations between Measures of Contract-Related Information Seeking (T1, T2, T3, T4)

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Age | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. Gender | .07 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3. T1 IS Career development | -.24 | -.02 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4. T1 IS Job content | -.15 | .00 | .38 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5. T1 IS Social atmosphere | -.13 | -.11 | .40 | .48 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6. T1 IS Financial rewards | -.25 | .03 | .46 | .24 | .33 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7. T1 IS Work-life balance | -.16 | .00 | .38 | .34 | .50 | .47 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8. T2 IS Career development | -.24 | -.07 | .46 | .20 | .32 | .31 | .32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9. T2 IS Job content | -.07 | -.01 | .29 | .48 | .36 | .13 | .18 | .41 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10. T2 IS Social atmosphere | -.08 | -.12 | .32 | .26 | .44 | .24 | .29 | .52 | .48 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11. T2 IS Financial rewards | -.21 | .01 | .29 | .18 | .19 | .49 | .33 | .47 | .26 | .46 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12. T2 IS Work-life balance | -.13 | -.10 | .26 | .20 | .33 | .31 | .43 | .45 | .28 | .57 | .54 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13. T3 IS Career development | -.25 | -.04 | .40 | .21 | .28 | .32 | .25 | .53 | .30 | .39 | .41 | .37 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14. T3 IS Job content | -.09 | -.02 | .26 | .38 | .37 | .12 | .14 | .42 | .49 | .41 | .21 | .29 | .52 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15. T3 IS Social atmosphere | -.11 | .00 | .38 | .29 | .43 | .19 | .27 | .42 | .42 | .52 | .31 | .38 | .52 | .61 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16. T3 IS Financial rewards | -.19 | .12 | .28 | .12 | .19 | .43 | .28 | .40 | .17 | .28 | .51 | .30 | .58 | .27 | .37 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17. T3 IS Work-life balance | -.15 | -.01 | .31 | .16 | .34 | .33 | .42 | .43 | .21 | .34 | .38 | .47 | .51 | .37 | .52 | .48 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18. T4 IS Career development | -.21 | .04 | .34 | .17 | .29 | .28 | .21 | .45 | .27 | .37 | .37 | .32 | .54 | .40 | .44 | .43 | .44 | | | | | | | | | | | | | | | | | | | | | | | | |
| 19. T4 IS Job content | -.10 | .04 | .29 | .31 | .29 | .16 | .17 | .30 | .46 | .34 | .24 | .26 | .38 | .53 | .44 | .27 | .32 | .57 | | | | | | | | | | | | | | | | | | | | | | | |
| 20. T4 IS Social atmosphere | -.05 | -.06 | .29 | .20 | .37 | .23 | .22 | .32 | .34 | .41 | .29 | .34 | .44 | .45 | .52 | .31 | .39 | .60 | .55 | | | | | | | | | | | | | | | | | | | | | | |
| 21. T4 IS Financial rewards | -.22 | .05 | .27 | .13 | .21 | .38 | .18 | .35 | .29 | .30 | .47 | .34 | .44 | .27 | .35 | .50 | .37 | .63 | .41 | .51 | | | | | | | | | | | | | | | | | | | | | |
| 22. T4 IS Work-life balance | -.16 | -.03 | .27 | .16 | .34 | .23 | .30 | .36 | .27 | .34 | .31 | .40 | .39 | .38 | .49 | .37 | .53 | .54 | .50 | .63 | .60 | | | | | | | | | | | | | | | | | | | | |
| 23. T1 IS Role behavior | -.13 | -.03 | .46 | .47 | .62 | .36 | .53 | .36 | .38 | .42 | .29 | .34 | .31 | .35 | .42 | .20 | .32 | .29 | .31 | .36 | .21 | .29 | | | | | | | | | | | | | | | | | | | |
| 24. T1 IS Flexibility | -.18 | -.02 | .45 | .34 | .51 | .34 | .50 | .41 | .35 | .44 | .29 | .33 | .34 | .32 | .36 | .25 | .28 | .29 | .28 | .28 | .23 | .30 | .70 | | | | | | | | | | | | | | | | | | |
| 25. T1 IS Loyalty | -.17 | .04 | .47 | .26 | .32 | .40 | .40 | .29 | .24 | .21 | .27 | .21 | .31 | .17 | .27 | .29 | .22 | .30 | .20 | .20 | .28 | .27 | .39 | .49 | | | | | | | | | | | | | | | | | |
| 26. T1 IS Ethical behavior | -.02 | .03 | .38 | .25 | .43 | .32 | .53 | .31 | .24 | .31 | .21 | .34 | .20 | .16 | .29 | .23 | .34 | .18 | .20 | .17 | .17 | .26 | .54 | .56 | .47 | | | | | | | | | | | | | | | | |
| 27. T1 IS Employability | -.18 | -.02 | .44 | .42 | .49 | .35 | .45 | .32 | .30 | .30 | .29 | .29 | .34 | .26 | .30 | .26 | .27 | .22 | .25 | .23 | .20 | .25 | .68 | .60 | .40 | .48 | | | | | | | | | | | | | | | |
| 28. T2 IS Role behavior | -.18 | -.09 | .38 | .33 | .46 | .34 | .29 | .48 | .45 | .58 | .41 | .48 | .41 | .45 | .52 | .29 | .44 | .38 | .41 | .40 | .36 | .40 | .60 | .48 | .28 | .39 | .50 | | | | | | | | | | | | | | |
| 29. T2 IS Flexibility | -.16 | .03 | .39 | .25 | .41 | .34 | .36 | .56 | .38 | .56 | .48 | .58 | .46 | .41 | .47 | .34 | .43 | .38 | .34 | .40 | .36 | .42 | .49 | .56 | .35 | .44 | .46 | .63 | | | | | | | | | | | | | |

Table A8.2.8 (Continued): Cross-Lagged Bivariate Correlations between Measures of Contract-Related Information Seeking (T1, T2, T3, T4)

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30. T2 IS Loyalty | -.10 | -.02 | .38 | .19 | .28 | .28 | .31 | .52 | .29 | .50 | .45 | .51 | .41 | .26 | .29 | .32 | .38 | .40 | .25 | .34 | .38 | .33 | .36 | .41 | .42 | .32 | .33 | .48 | .55 | | | | | | | | | | | | |
| 31. T2 IS Ethical behavior | -.02 | .02 | .34 | .27 | .40 | .37 | .37 | .45 | .30 | .50 | .42 | .48 | .38 | .35 | .43 | .33 | .43 | .36 | .34 | .38 | .38 | .39 | .47 | .43 | .33 | .56 | .40 | .62 | .62 | .51 | | | | | | | | | | | |
| 32 T2 IS Employability | -.19 | .02 | .36 | .28 | .35 | .32 | .26 | .45 | .41 | .54 | .41 | .49 | .41 | .39 | .47 | .29 | .35 | .42 | .39 | .37 | .40 | .39 | .43 | .42 | .29 | .35 | .50 | .69 | .61 | .54 | .56 | | | | | | | | | | |
| 33. T3 IS Role behavior | -.11 | -.06 | .36 | .33 | .42 | .25 | .28 | .44 | .42 | .47 | .37 | .42 | .51 | .62 | .68 | .36 | .60 | .37 | .46 | .46 | .38 | .45 | .50 | .43 | .29 | .33 | .46 | .60 | .51 | .35 | .47 | .47 | | | | | | | | | |
| 34. T3 IS Flexibility | -.12 | .04 | .36 | .25 | .33 | .24 | .26 | .46 | .35 | .42 | .35 | .38 | .53 | .55 | .57 | .43 | .52 | .44 | .40 | .38 | .38 | .41 | .44 | .54 | .34 | .33 | .40 | .47 | .56 | .38 | .44 | .47 | .70 | | | | | | | | |
| 35. T3 IS Loyalty | -.15 | .04 | .36 | .17 | .22 | .29 | .24 | .45 | .20 | .35 | .38 | .31 | .53 | .33 | .37 | .43 | .50 | .37 | .29 | .29 | .35 | .36 | .25 | .35 | .44 | .26 | .26 | .36 | .46 | .50 | .41 | .37 | .45 | .54 | | | | | | | |
| 36. T3 IS Ethical behavior | -.05 | .04 | .37 | .26 | .42 | .33 | .31 | .41 | .30 | .45 | .37 | .38 | .42 | .42 | .52 | .41 | .58 | .36 | .37 | .43 | .38 | .48 | .43 | .49 | .32 | .39 | .35 | .47 | .48 | .39 | .54 | .43 | .64 | .60 | .61 | | | | | | |
| 37. T3 IS Employability | -.14 | .08 | .38 | .25 | .37 | .32 | .33 | .39 | .29 | .40 | .33 | .40 | .55 | .48 | .51 | .47 | .58 | .44 | .42 | .43 | .36 | .42 | .40 | .44 | .31 | .35 | .45 | .47 | .48 | .36 | .48 | .60 | .66 | .60 | .45 | .62 | | | | | |
| 38. T4 IS Role behavior | -.11 | -.04 | .30 | .22 | .36 | .21 | .27 | .34 | .32 | .38 | .31 | .39 | .42 | .45 | .50 | .32 | .43 | .61 | .61 | .70 | .54 | .67 | .40 | .34 | .23 | .27 | .32 | .48 | .44 | .32 | .40 | .43 | .55 | .47 | .38 | .47 | .48 | | | | |
| 39. T4 IS Flexibility | -.19 | -.01 | .29 | .16 | .29 | .24 | .26 | .35 | .24 | .38 | .31 | .38 | .42 | .35 | .44 | .36 | .44 | .58 | .50 | .56 | .60 | .67 | .36 | .39 | .26 | .29 | .27 | .44 | .45 | .33 | .40 | .42 | .46 | .50 | .40 | .48 | .44 | .74 | | | |
| 40. T4 IS Loyalty | -.19 | .06 | .31 | .13 | .24 | .26 | .27 | .33 | .22 | .28 | .35 | .30 | .45 | .31 | .40 | .47 | .41 | .60 | .42 | .49 | .61 | .58 | .27 | .29 | .30 | .23 | .21 | .32 | .35 | .38 | .31 | .37 | .33 | .38 | .42 | .39 | .39 | .60 | .63 | | |
| 41. T4 IS Ethical behavior | -.04 | -.02 | .30 | .15 | .37 | .26 | .31 | .34 | .22 | .34 | .32 | .38 | .34 | .31 | .44 | .34 | .44 | .48 | .36 | .55 | .53 | .61 | .40 | .39 | .35 | .44 | .30 | .41 | .37 | .39 | .46 | .38 | .42 | .43 | .40 | .55 | .42 | .65 | .64 | .61 | |
| 42. T4 IS Employability | -.17 | .04 | .30 | .21 | .34 | .23 | .26 | .33 | .28 | .35 | .33 | .38 | .46 | .39 | .46 | .40 | .44 | .64 | .51 | .61 | .59 | .65 | .35 | .36 | .30 | .25 | .36 | .40 | .43 | .39 | .39 | .50 | .45 | .46 | .38 | .45 | .56 | .75 | .63 | .65 | .64 |

$N = 333$

Correlations > .11, $p < .05$; correlations > .14, $p < .01$; correlations > .19, $p < .001$

IS = Information Seeking

Table A8.2.9: Cross-Sectional and Cross-Lagged Bivariate Correlations between Measures of Contract Dimension Career Development

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Promissory beliefs T1 | | | | | | | | | | | | |
| 2. Promissory beliefs T3 | .58 | | | | | | | | | | | |
| 3. Promissory beliefs T4 | .55 | .61 | | | | | | | | | | |
| 4. Inducements received T2 | .45 | .39 | .33 | | | | | | | | | |
| 5. Inducements received T3 | .24 | .32 | .25 | .33 | | | | | | | | |
| 6. Inducements received T4 | .25 | .32 | .28 | .38 | .46 | | | | | | | |
| 7. Promises fulfilled T2 | .25 | .28 | .22 | .62 | .38 | .31 | | | | | | |
| 8. Promises fulfilled T3 | .23 | .27 | .18 | .34 | .63 | .42 | .47 | | | | | |
| 9. Promises fulfilled T4 | .15 | .21 | .11 | .29 | .38 | .79 | .34 | .44 | | | | |
| 10. Information seeking T1 | .12 | .16 | .19 | .11 | .23 | .13 | .10 | .18 | .17 | | | |
| 11. Information seeking T2 | .14 | .22 | .25 | .11 | .16 | .09 | .07 | .11 | .06 | .46 | | |
| 12. Information seeking T3 | .05 | .20 | .22 | .05 | .18 | .13 | .01 | .11 | .07 | .40 | .53 | |
| 13. Information seeking T4 | .08 | .13 | .19 | .06 | .06 | .12 | .01 | .05 | .06 | .34 | .45 | .54 |

$N = 333$

Correlations > .11, $p < .05$; correlations > .14, $p < .01$; correlations > .19, $p < .001$

Table A8.2.10: Cross-Sectional and Cross-Lagged Bivariate Correlations between Measures of Contract Dimension Job Content

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Promissory beliefs T1 | | | | | | | | | | | | |
| 2. Promissory beliefs T3 | .51 | | | | | | | | | | | |
| 3. Promissory beliefs T4 | .51 | .61 | | | | | | | | | | |
| 4. Inducements received T2 | .41 | .45 | .35 | | | | | | | | | |
| 5. Inducements received T3 | .37 | .56 | .43 | .52 | | | | | | | | |
| 6. Inducements received T4 | .40 | .44 | .44 | .52 | .60 | | | | | | | |
| 7. Promises fulfilled T2 | .40 | .37 | .30 | .74 | .48 | .47 | | | | | | |
| 8. Promises fulfilled T3 | .34 | .45 | .35 | .51 | .80 | .51 | .55 | | | | | |
| 9. Promises fulfilled T4 | .29 | .27 | .23 | .42 | .47 | .76 | .47 | .48 | | | | |
| 10. Information seeking T1 | .09 | .07 | .07 | .16 | .11 | .12 | .12 | .15 | .14 | | | |
| 11. Information seeking T2 | .13 | .05 | .07 | .14 | .04 | .06 | .08 | .08 | .08 | .48 | | |
| 12. Information seeking T3 | .07 | .03 | .04 | .11 | .07 | .06 | .08 | .14 | .09 | .38 | .49 | |
| 13. Information seeking T4 | .12 | .10 | .10 | .13 | .15 | .12 | .10 | .12 | .14 | .31 | .46 | .53 |

$N = 333$

Correlations > .11, $p < .05$; correlations > .14, $p < .01$; correlations > .19, $p < .001$

Table A8.2.11: Cross-Sectional and Cross-Lagged Bivariate Correlations between Measures of Contract Dimension Social Atmosphere

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Promissory beliefs T1 | | | | | | | | | | | | |
| 2. Promissory beliefs T3 | .62 | | | | | | | | | | | |
| 3. Promissory beliefs T4 | .57 | .68 | | | | | | | | | | |
| 4. Inducements received T2 | .27 | .32 | .26 | | | | | | | | | |
| 5. Inducements received T3 | .24 | .36 | .29 | .65 | | | | | | | | |
| 6. Inducements received T4 | .29 | .32 | .34 | .61 | .61 | | | | | | | |
| 7. Promises fulfilled T2 | .27 | .30 | .25 | .76 | .56 | .55 | | | | | | |
| 8. Promises fulfilled T3 | .26 | .34 | .31 | .61 | .79 | .62 | .62 | | | | | |
| 9. Promises fulfilled T4 | .25 | .26 | .28 | .57 | .56 | .81 | .56 | .67 | | | | |
| 10. Information seeking T1 | .25 | .26 | .20 | .18 | .20 | .17 | .15 | .21 | .16 | | | |
| 11. Information seeking T2 | .30 | .21 | .16 | .18 | .11 | .16 | .15 | .12 | .14 | .44 | | |
| 12. Information seeking T3 | .18 | .18 | .08 | .03 | .07 | .09 | .04 | .09 | .07 | .43 | .52 | |
| 13. Information seeking T4 | .15 | .21 | .13 | .06 | .10 | .09 | .06 | .11 | .14 | .37 | .41 | .52 |

$N = 333$

Correlations > .11, $p < .05$; correlations > .14, $p < .01$; correlations > .19, $p < .001$

Table A8.2.12: Cross-Sectional and Cross-Lagged Bivariate Correlations between Measures of Contract Dimension Financial Rewards

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Promissory beliefs T1 | | | | | | | | | | | | |
| 2. Promissory beliefs T3 | .59 | | | | | | | | | | | |
| 3. Promissory beliefs T4 | .44 | .60 | | | | | | | | | | |
| 4. Inducements received T2 | .37 | .40 | .35 | | | | | | | | | |
| 5. Inducements received T3 | .37 | .44 | .35 | .48 | | | | | | | | |
| 6. Inducements received T4 | .29 | .28 | .39 | .50 | .54 | | | | | | | |
| 7. Promises fulfilled T2 | .16 | .15 | .06 | .50 | .27 | .36 | | | | | | |
| 8. Promises fulfilled T3 | .23 | .18 | .10 | .39 | .57 | .45 | .50 | | | | | |
| 9. Promises fulfilled T4 | .15 | .10 | .15 | .31 | .36 | .68 | .38 | .51 | | | | |
| 10. Information seeking T1 | .16 | .19 | .17 | .18 | .16 | .07 | .03 | -.01 | .06 | | | |
| 11. Information seeking T2 | .10 | .08 | .18 | .09 | .12 | .01 | -.12 | -.08 | -.06 | .49 | | |
| 12. Information seeking T3 | .07 | .14 | .12 | .05 | .10 | .06 | -.10 | -.04 | -.07 | .43 | .51 | |
| 13. Information seeking T4 | .17 | .11 | .14 | .02 | .14 | .03 | -.13 | -.05 | -.11 | .38 | .47 | .50 |

$N = 333$

Correlations > .11, $p < .05$; correlations > .14, $p < .01$; correlations > .19, $p < .001$

Table A8.2.13: Cross-Sectional and Cross-Lagged Bivariate Correlations between Measures of Contract Dimension Work-Life Balance

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Promissory beliefs T1 | | | | | | | | | | | | |
| 2. Promissory beliefs T3 | .60 | | | | | | | | | | | |
| 3. Promissory beliefs T4 | .55 | .69 | | | | | | | | | | |
| 4. Inducements received T2 | .47 | .49 | .49 | | | | | | | | | |
| 5. Inducements received T3 | .44 | .60 | .48 | .61 | | | | | | | | |
| 6. Inducements received T4 | .36 | .47 | .59 | .60 | .65 | | | | | | | |
| 7. Promises fulfilled T2 | .35 | .40 | .34 | .71 | .58 | .52 | | | | | | |
| 8. Promises fulfilled T3 | .29 | .45 | .36 | .53 | .77 | .56 | .63 | | | | | |
| 9. Promises fulfilled T4 | .28 | .39 | .45 | .52 | .57 | .82 | .54 | .60 | | | | |
| 10. Information seeking T1 | .15 | .12 | .16 | .06 | .11 | .06 | .07 | .10 | .05 | | | |
| 11. Information seeking T2 | .07 | .09 | .11 | .04 | .00 | -.02 | .00 | .03 | -.01 | .43 | | |
| 12. Information seeking T3 | .07 | .16 | .12 | .05 | .07 | -.03 | -.01 | .05 | -.05 | .42 | .47 | |
| 13. Information seeking T4 | .12 | .09 | .12 | .09 | -.04 | .01 | .03 | .03 | .02 | .30 | .40 | .53 |

$N = 333$

Correlations > .11, $p < .05$; correlations > .14, $p < .01$; correlations > .19, $p < .001$

Table A8.2.14: Cross-Sectional and Cross-Lagged Bivariate Correlations between Measures of Contract Dimension In & Extra Role Behavior

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Promissory beliefs T1 | | | | | | | | | | | | |
| 2. Promissory beliefs T3 | .61 | | | | | | | | | | | |
| 3. Promissory beliefs T4 | .57 | .64 | | | | | | | | | | |
| 4. Inducements received T2 | .24 | .38 | .27 | | | | | | | | | |
| 5. Inducements received T3 | .30 | .44 | .39 | .63 | | | | | | | | |
| 6. Inducements received T4 | .28 | .38 | .42 | .54 | .66 | | | | | | | |
| 7. Promises fulfilled T2 | .21 | .23 | .23 | .58 | .43 | .47 | | | | | | |
| 8. Promises fulfilled T3 | .22 | .28 | .26 | .41 | .59 | .50 | .55 | | | | | |
| 9. Promises fulfilled T4 | .23 | .26 | .25 | .43 | .45 | .60 | .55 | .59 | | | | |
| 10. Information seeking T1 | .31 | .27 | .18 | .10 | .16 | .07 | .12 | .17 | .15 | | | |
| 11. Information seeking T2 | .28 | .27 | .19 | .16 | .16 | .07 | .12 | .13 | .11 | .60 | | |
| 12. Information seeking T3 | .25 | .29 | .18 | .15 | .11 | .10 | .08 | .12 | .10 | .50 | .60 | |
| 13. Information seeking T4 | .22 | .21 | .12 | .12 | .07 | .05 | .04 | .07 | .12 | .40 | .48 | .55 |

$N = 333$

Correlations > .11, $p < .05$; correlations > .14, $p < .01$; correlations > .19, $p < .001$

Table A8.2.14: Cross-Sectional and Cross-Lagged Bivariate Correlations between Measures of Contract Dimension Flexibility

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Promissory beliefs T1 | | | | | | | | | | | | |
| 2. Promissory beliefs T3 | .65 | | | | | | | | | | | |
| 3. Promissory beliefs T4 | .59 | .71 | | | | | | | | | | |
| 4. Inducements received T2 | .38 | .46 | .45 | | | | | | | | | |
| 5. Inducements received T3 | .40 | .52 | .48 | .70 | | | | | | | | |
| 6. Inducements received T4 | .33 | .48 | .51 | .61 | .75 | | | | | | | |
| 7. Promises fulfilled T2 | .05 | .07 | .16 | .45 | .26 | .29 | | | | | | |
| 8. Promises fulfilled T3 | .13 | .17 | .21 | .29 | .46 | .43 | .37 | | | | | |
| 9. Promises fulfilled T4 | .05 | .15 | .21 | .32 | .36 | .52 | .40 | .57 | | | | |
| 10. Information seeking T1 | .28 | .33 | .31 | .11 | .17 | .08 | -.03 | .06 | .03 | | | |
| 11. Information seeking T2 | .27 | .34 | .31 | .16 | .17 | .12 | .02 | .00 | .02 | .56 | | |
| 12. Information seeking T3 | .17 | .25 | .19 | .07 | .15 | .10 | -.02 | .05 | -.01 | .54 | .56 | |
| 13. Information seeking T4 | .14 | .22 | .17 | .06 | .04 | .04 | .02 | -.05 | -.01 | .39 | .45 | .50 |

$N = 333$

Correlations > .11, $p < .05$; correlations > .14, $p < .01$; correlations > .19, $p < .001$

Table A8.2.15: Cross-Sectional and Cross-Lagged Bivariate Correlations between Measures of Contract Dimension Loyalty

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Promissory beliefs T1 | | | | | | | | | | | | |
| 2. Promissory beliefs T3 | .59 | | | | | | | | | | | |
| 3. Promissory beliefs T4 | .60 | .64 | | | | | | | | | | |
| 4. Inducements received T2 | .19 | .13 | .13 | | | | | | | | | |
| 5. Inducements received T3 | .23 | .37 | .31 | .46 | | | | | | | | |
| 6. Inducements received T4 | .25 | .37 | .40 | .45 | .46 | | | | | | | |
| 7. Promises fulfilled T2 | .17 | .14 | .12 | .63 | .39 | .30 | | | | | | |
| 8. Promises fulfilled T3 | .14 | .30 | .21 | .30 | .60 | .42 | .39 | | | | | |
| 9. Promises fulfilled T4 | .17 | .24 | .32 | .31 | .37 | .61 | .31 | .45 | | | | |
| 10. Information seeking T1 | .26 | .24 | .25 | -.06 | .00 | -.02 | .00 | -.12 | -.08 | | | |
| 11. Information seeking T2 | .25 | .20 | .26 | .02 | .02 | -.01 | .00 | -.01 | .01 | .42 | | |
| 12. Information seeking T3 | .22 | .22 | .23 | -.04 | -.09 | -.01 | -.04 | -.10 | -.05 | .44 | .50 | |
| 13. Information seeking T4 | .16 | .19 | .17 | .00 | .04 | -.02 | .02 | .02 | .08 | .30 | .38 | .42 |

$N = 333$

Correlations > .11, $p < .05$; correlations > .14, $p < .01$; correlations > .19, $p < .001$

Table A8.2.16: Cross-Sectional and Cross-Lagged Bivariate Correlations between Measures of Contract Dimension Ethical Behavior

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Promissory beliefs T1 | | | | | | | | | | | | |
| 2. Promissory beliefs T3 | .63 | | | | | | | | | | | |
| 3. Promissory beliefs T4 | .62 | .65 | | | | | | | | | | |
| 4. Inducements received T2 | .23 | .33 | .32 | | | | | | | | | |
| 5. Inducements received T3 | .30 | .47 | .45 | .52 | | | | | | | | |
| 6. Inducements received T4 | .26 | .44 | .51 | .45 | .61 | | | | | | | |
| 7. Promises fulfilled T2 | .22 | .29 | .29 | .52 | .35 | .36 | | | | | | |
| 8. Promises fulfilled T3 | .20 | .37 | .33 | .30 | .56 | .45 | .44 | | | | | |
| 9. Promises fulfilled T4 | .20 | .38 | .39 | .32 | .43 | .62 | .40 | .57 | | | | |
| 10. Information seeking T1 | .24 | .19 | .18 | -.01 | -.02 | .08 | .02 | -.03 | .06 | | | |
| 11. Information seeking T2 | .18 | .15 | .10 | .02 | -.06 | .01 | .06 | -.10 | .02 | .56 | | |
| 12. Information seeking T3 | .09 | .15 | .02 | .00 | -.07 | -.06 | .06 | .01 | -.03 | .39 | .54 | |
| 13. Information seeking T4 | .10 | .16 | .08 | -.02 | -.03 | -.05 | -.04 | -.01 | .04 | .44 | .46 | .55 |

$N = 333$

Correlations > .11, $p < .05$; correlations > .14, $p < .01$; correlations > .19, $p < .001$

Table A8.2.17: Cross-Sectional and Cross-Lagged Bivariate Correlations between Measures of Contract Dimension Employability

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Promissory beliefs T1 | | | | | | | | | | | | |
| 2. Promissory beliefs T3 | .56 | | | | | | | | | | | |
| 3. Promissory beliefs T4 | .54 | .62 | | | | | | | | | | |
| 4. Inducements received T2 | .40 | .45 | .45 | | | | | | | | | |
| 5. Inducements received T3 | .44 | .55 | .49 | .66 | | | | | | | | |
| 6. Inducements received T4 | .41 | .49 | .58 | .56 | .61 | | | | | | | |
| 7. Promises fulfilled T2 | .24 | .23 | .32 | .67 | .47 | .41 | | | | | | |
| 8. Promises fulfilled T3 | .18 | .31 | .29 | .50 | .68 | .49 | .52 | | | | | |
| 9. Promises fulfilled T4 | .15 | .20 | .32 | .30 | .40 | .61 | .35 | .51 | | | | |
| 10. Information seeking T1 | .26 | .26 | .28 | .16 | .18 | .18 | .10 | .05 | .14 | | | |
| 11. Information seeking T2 | .19 | .24 | .22 | .13 | .15 | .10 | .04 | .03 | .02 | .50 | | |
| 12. Information seeking T3 | .17 | .29 | .22 | .16 | .18 | .14 | .06 | .09 | .06 | .45 | .60 | |
| 13. Information seeking T4 | .13 | .22 | .22 | .07 | .12 | .11 | -.01 | .00 | .00 | .36 | .50 | .56 |

$N = 333$

Correlations > .11, $p < .05$; correlations > .14, $p < .01$; correlations > .19, $p < .001$

# Samenvatting

## Een Longitudinaal Onderzoek naar de Individuele Antecedenten en de Ontwikkeling van het Psychologisch Contract bij Nieuwe Medewerkers tijdens het Socialisatieproces

---

**Probleemstelling en Onderzoeksvragen**

In Hoofdstuk 1 gaven we aan dat het psychologisch contract, gedefinieerd als de percepties van werknemers betreffende de voorwaarden van hun arbeidsrelatie, een belangrijk construct is om de attitudes en gedragingen van werknemers te verklaren. Het psychologisch contract onstaat wanneer een werknemer van mening is dat zijn organisatie een aantal beloften heeft gemaakt over de tegemoetkomingen die hij zal krijgen, in ruil voor de eigen bijdragen aan de organisatie. Bestaand onderzoek heeft ondermeer aangetoond dat werknemers die van mening zijn dat de organisatie haar beloften niet nakomt, hun eigen inzet voor de organisatie verminderen en meer geneigd zijn om de organisatie te verlaten. Anderzijds leidt een positieve evaluatie van het psychologisch contract tot een verhoogd commitment en meer inzet en vermindert de kans dat werknemers de organisatie vrijwillig verlaten. In het licht van deze empirische evidentie is het van belang om meer duidelijkheid te verkrijgen over de antecedenten en de ontwikkeling van het psychologisch contract. Er bestaat tot op heden echter weinig kennis over dit proces. Op een theoretisch niveau hebben onderzoekers enkele modellen voorgesteld, maar er is vrijwel geen empirisch onderzoek dat de vooropgestelde relaties ook expliciet bestudeert door na te gaan op welke wijze het psychologisch contract zich over de tijd heen ontwikkelt, rekening houdend met individuele en contextuele factoren.

Onze studie beoogt daarom een bijdrage te leveren tot de verdere ontwikkeling van het onderzoeksgebied door zich expliciet te richten op de vorming van het psychologisch contract bij het begin van de arbeidsrelatie. We formuleerden met name de volgende twee onderzoeksvragen: (1) *Wat is de relatie tussen individuele kenmerken van nieuwe medewerkers en de inhoud en kenmerken van hun psychologisch contract bij indiensttreding?*, en (2) *Hoe verloopt de ontwikkeling van het psychologisch contract bij nieuwe medewerkers tijdens het socialisatieproces?*

Om een antwoord te formuleren op beide vragen werd een longitudinaal onderzoek uitgevoerd bij nieuwe medewerkers in acht organisaties. De tijdsspanne van het onderzoek was het eerste jaar na indiensttreding. Deze periode stemt overeen met wat binnen de literatuur algemeen als de socialisatieperiode wordt omschreven. Binnen deze periode werden vijf datacollecties uitgevoerd. De eerste onderzoeksvraag – die de eerder statische relatie tussen individuele antecedenten en initiële psychologisch contract percepties betreft – werd beantwoord op basis van de data verzameld tijdens de eerste twee datacollecties (respectievelijk bij indiensttreding en 4 weken na indiensttreding). De tweede onderzoeksvraag – die expliciet het dynamisch karakter van het psychologisch contract tijdens de socialisatieperiode betreft – werd beantwoord op basis van de data verzameld tijdens de tweede tot en met vijfde datacollectie (4 weken, 3 maanden, 6 maanden en 12 maanden na indiensttreding).

**Conceptualisering van het Psychologisch Contract**

In Hoofdstuk 2 definieerden wij het psychologisch contract als een individuele perceptie van de voorwaarden van de uitwisselingsrelatie tussen werknemer en organisatie. Deze perceptie is gebaseerd op beloften, die tot stand komen binnen de bredere context van de organisatie en die aanleiding geven tot verwachtingen over wat de werknemer dient bij te dragen en welke bijdragen hij / zij hiervoor in ruil van de organisatie zal krijgen. De basisassumptie in de literatuur over het psychologisch contract is dat de arbeidsovereenkomst tussen werknemer en organisatie per definitie subjectief is omdat alle overeenkomsten tussen mensen voorwerp zijn van een subjectieve interpretatie. In dit hoofdstuk bespraken we de belangrijkste elementen in de definitie van het

psychologisch contract, met name (1) *percepties*, (2) *beloften*, (3) *wederkerigheid van verplichtingen*, (4) *rol van de andere partij*. Daarnaast stellen onderzoekers ook dat het psychologisch contract dynamisch is en dat er zich dus wijzigingen kunnen voordoen over de tijd heen. We hebben vervolgens een overzicht gegeven van bestaande operationaliseringen van het psychologisch contract en we hebben hierbij drie facetten onderscheiden, met name (1) inhoud, (2) kenmerken en (3) evaluatie. Uit dit overzicht blijkt dat er tot op heden een gebrek aan consensus en standaardisatie is met betrekking tot de wijze waarop deze drie facetten worden gemeten en met betrekking tot de items of dimensies die relevant zijn om te worden bestudeerd. Met name het centrale element "beloften" wordt door veel onderzoekers niet mee opgenomen in de meting van het psychologisch contract. Vervolgens hebben we in dit onderzoek een samenvatting gegeven van de bestaande empirische evidentie voor de impact van het evaluatieve facet van het psychologisch contract op werknemersattitudes en –gedragingen.

Aangezien de literatuur wordt gekenmerkt door een veelheid aan studies, die echter een fundamenteel theoretisch kader missen, hebben we vervolgens vier meer fundamentele, theoretische perspectieven besproken die relevant zijn om het psychologisch contract verder te begrijpen: (1) de economische theorievorming over transactiekosten en "agency", die meer inzicht verschaft in de begrensde rationaliteit van partijen aan de arbeidsrelatie; (2) theorieën over sociale perceptie en cognitie, die meer inzicht geven in de betekenis van het psychologisch contract als een subjectief, mentaal model over de arbeidsrelatie; (3) "social exchange" theorieën die de begrippen wederkerigheid en evenwicht in uitwisselingsrelaties verder verduidelijken; en (4) carrièretheorieën die meer inzicht geven in de interactie tussen individu en organisatie. Deze theoretische perspectieven vormen een relevant kader om in de volgende hoofdstukken dieper in te gaan op theorievorming over de antecedenten en de ontwikkeling van het psychologisch contract.

**Antecedenten van het Psychologisch Contract**

De eerste onderzoeksvraag die in onze studie centraal stond, betreft de invloed van individuele factoren op het psychologisch contract. In Hoofdstuk 3 hebben we daarom de theoretische en empirische evidentie over de antecedenten van het psychologisch contract verder uitgewerkt, rekening houdend met antecedenten op drie niveaus (maatschappelijk, organisationeel en individueel). Uitgangspunt hierbij was dat het psychologisch contract, als een individuele perceptie, zich ontwikkelt binnen de context van de organisatie en de bredere context van de maatschappij. Na een samenvatting van de literatuur over maatschappelijke en organisationele antecedenten (met name de invloed van organisatievertegenwoordigers, "human resources" praktijken, en wettelijke arbeidsregelingen), hebben we een gedetailleerde bespreking gegeven van antecedenten op het individuele niveau, aangezien dit de centrale focus is van onze eerste onderzoeksvraag. In het licht van de beperkte informatie die er hierover in de psychologisch contract literatuur beschikbaar is, hebben we onze bespreking gebaseerd op onderzoekstradities die eveneens de rol van individuele disposities in werknemersgedragingen- en attitudes bestuderen. Op basis van een vergelijking van de individuele factoren die door psychologisch contract onderzoekers worden onderscheiden en deze langer bestaande en meer uitgewerkte onderzoekstradities, werd een selectie gemaakt van vier individuele antecedenten die in ons onderzoeksmodel werden opgenomen: (1) *werkwaarden*, (2) *carrièrestrategie*, (3) *locus van controle*, en (4) *uitwisselingsoriëntatie*. Deze vier factoren werden uitgebreid gedefinieerd en toegelicht. We vertrokken hierbij telkens van de algemene situering van de centrale constructen en hun relatie met werknemersattitudes en –gedragingen en pasten deze vervolgens toe op het psychologisch contract. Voor zover beschikbaar werd in dit overzicht de empirische evidentie vanuit de psychologisch contract literatuur geïntegreerd.

**Psychologisch Contract Ontwikkeling tijdens het Socialisatieproces**

Onze tweede centrale onderzoeksvraag betrof de ontwikkeling van het psychologisch contract van nieuwe medewerkers tijdens het socialisatieproces (met name tijdens het eerste jaar na hun indiensttreding). We vatten Hoofdstuk 4 aan met een toelichting bij het gebrek aan theoretische en empirische evidentie hierover binnen de psychologisch contract literatuur. De uitgebreide onderzoekstraditie over socialisatie van nieuwkomers levert echter een relevant kader om ook de ontwikkeling van het psychologisch contract te bestuderen. Daarom hebben we in dit hoofdstuk een overzicht gegeven van de voornaamste proposities en bevindingen uit de

socialisatieliteratuur. Hierbij hebben we met name aandacht besteed aan de rol van informatieverzameling en van proactief gedrag bij nieuwkomers in het bepalen van hun aanpassing binnen de organisatie. Vervolgens hebben we overzicht gegeven van de beschikbare theorievorming en onderzoeksresultaten over psychologisch contract ontwikkeling tijdens socialisatie. Hieruit bleek dat de kennis hierover tot op heden zeer fragmentarisch is. Daarom hebben we de psychologisch contract literatuur vergeleken met de socialisatieliteratuur aan de hand van vijf centrale criteria: (1) *wederzijdse aanpassing tussen werknemer en organisatie* als centrale uitkomst; (2) *informatieverzameling en betekenisgeving* als belangrijkste processen; (3) het belang van de *tijdsdimensie*; (4) het *individu als centrale actor*; en (5) de *organisatie als beïnvloedende context.*

**Hypothesen**

Op basis van het literatuuronderzoek formuleerden we in Hoofdstuk 5 twee groepen van hypothesen waarvan de toetsing in het longitudinale onderzoek een antwoord moest bieden op onze twee centrale onderzoeksvragen.
Vertrekkend van de discussie over de drie facetten van het psychologisch contract in Hoofdstuk 2, onderscheidden we als centrale uitkomstvariabelen (1) de inhoud, (2) de kenmerken, en (3) de evaluatie van het psychologisch contract. Rekening houdend met onze kritische opmerkingen over bestaande metingen van het psychologisch contract, werden voor de meting van inhoud en evaluatie van het psychologisch contract zowel werknemers- als werkgeversbijdragen onderscheiden en werden voor beide meerdere inhoudsdimensies in acht genomen. De vijf dimensies van werknemersbijdragen waren: (1) inzet & performantie, (2) flexibiliteit, (3) loyaliteit, (4) ethisch gedrag, en (5) inzetbaarheid. De vijf dimensies van werkgeversbijdragen waren: (1) loopbaanontwikkeling, (2) jobinhoud, (3) sociale sfeer, (4) financiële beloningen, en (5) balans tussen werk en privé-leven. Kenmerken van het psychologisch contract verwezen naar de mate waarin de arbeidrelatie als relationeel wordt beschreven.

De eerste groep hypothesen had betrekking op de relatie tussen de individuele factoren die we in Hoofdstuk 3 hadden besproken (werkwaarden, carrièrestrategie, locus van controle en uitwisselingsoriëntatie) en de inhoud en kenmerken van het initiële psychologisch contract van nieuwkomers. De algemene redenering hierbij was dat werknemers van elkaar verschillen wat betreft de waarden die zij nastreven in hun carrière, wat betreft de manier waarop zij deze waarden willen realiseren, wat betreft de mate waarin zij denken controle te hebben over wat hen overkomt in hun carrière, en wat betreft hun gevoeligheid voor evenwicht en wederkerigheid in uitwisselingsrelaties. We stelden dat deze verschillen niet enkel een directe invloed uitoefenen op werknemers attitudes en -gedragingen, zoals tevredenheid, commitment en performantie (zoals in eerder onderzoek werd aangetoond), maar dat zij tevens de initiële percepties van nieuwe medewerkers over de voorwaarden van hun uitwisselingsrelatie beïnvloeden.

De tweede groep hypothesen had betrekking op de ontwikkeling van het psychologisch contract tijdens de socialisatieperiode en bouwde voort op de theoretische inzichten uitgewerkt in Hoofdstuk 4. Deze hypothesen sluiten aan bij de drie doelstellingen van longitudinaal onderzoek en hebben betrekking op: (1) de beschrijving van veranderingen in psychologisch contract percepties, evaluaties en informatieverzameling over de tijd heen; (2) de verklaring van deze veranderingen door de invloed van concrete ervaringen en van tussentijdse evaluaties van beloften op veranderingen in percepties na te gaan; (3) de voorspelling van uitkomsten van het veranderingsproces, met name de invloed van informatieverzameling op de evaluatie van beloften en op de algemene evaluatie van de arbeidsrelatie bij het einde van de socialisatieperiode.

**Onderzoeksmethodologie en Ontwikkeling van Meetinstrumenten**

Deze hypothesen werden vervolgens getoetst op basis van een longitudinaal onderzoek. De gehanteerde methodologie en de meetinstrumenten werden uitgebreid toegelicht in Hoofdstuk 6. In acht organisaties werden in totaal 1361 nieuwe medewerkers, die als bediende werden aangeworven tijdens de periode augustus 2000 – maart 2001, in het panel opgenomen. Zij werden tijdens de eerste dagen na indiensttreding (persoonlijk via brief of tijdens een introductieseminarie) uitgenodigd om aan het onderzoek deel te nemen, met garantie van anonimiteit en vertrouwelijke behandeling van hun antwoorden. Tachtig procent hiervan (1064) nam

daadwerkelijk deel aan de eerste meting. Uiteindelijk hebben 333 nieuwkomers aan het volledige onderzoek deelgenomen. Uit onze analyses van mogelijke selectieve uitval van respondenten bleek dat er geen systematische effecten zijn van deze uitval op de variabelen die in de studie werden opgenomen.

De datacollecties vonden plaats op vijf momenten, verspreid over het eerste jaar van tewerkstelling; T0: bij indiensttreding; T1: na 4 weken; T2: na 3 maanden; T3: na 6 maanden; T4: na 12 maanden. Voor het beantwoorden van de eerste onderzoeksvraag werden de data, verzameld op T0 (meting van individuele antecedenten) en T1 (meting van gepercipieerde beloften, psychologisch contract kenmerken en informatieverzameling), geanalyseerd. Voor het beantwoorden van de tweede onderzoeksvraag werden de data van T1 tot en met T4 geanalyseerd. Deze hadden betrekking op gepercipieerde beloften, feitelijke ervaringen, evaluaties van beloften en informatieverzameling. De metingen op T2, T3 en T4 vormden een herhaalde meting van de meting op T1. Uitzondering was de evaluatie van beloften, die slechts vanaf T2 werd gemeten. Op T4 werden ook enkele algemene uitkomsten ("met expectations" en tevredenheid) gemeten.

De individuele antecedenten, psychologisch contract variabelen en informatieverzameling werden geoperationaliseerd aan de hand van beschikbare en zelfontwikkelde items en schalen. Voor de meting van werkwaarden, carrièrestrategie, locus van controle en uitwisselingsoriëntatie werd gebruik gemaakt van bestaande schalen. Dit was eveneens het geval voor de meting van informatieverzameling en van de kenmerken van het psychologisch contract. Uit de analyses bleek dat deze schalen in ons onderzoek een voldoende betrouwbaarheid hadden. Gezien het gebrek aan gestandaardiseerd meetinstrument voor de inhoud en evaluatie van het psychologisch contract werd hiervoor een nieuwe schaal ontwikkeld. Dit gebeurde op basis van onze literatuurstudie, gesprekken met mensen uit de praktijk, en twee voorstudies. Deze meting richtte zich op de inhoudsdimensies van werknemers- en werkgeversbijdragen zoals ze hierboven werden opgesomd. In Hoofdstuk 6 werd een uitgebreide toelichting gegeven bij de procedures en de toetsing van de betrouwbaarheid en validiteit van deze schalen. De exploratorische en confirmatorische factoranalyses die we uitvoerden, alsook de betrouwbaarheidsgegevens, toonden aan dat deze dimensies relevant zijn om de inhoud van het psychologisch contract te bestuderen.

**Resultaten: Invloed van Individuele Antecedenten op het Psychologisch Contract bij Nieuwkomers**

De eerste onderzoeksvraag werd geanalyseerd via hiërarchische regressie-analyses. De resultaten hiervan werden gepresenteerd in Hoofdstuk 7. Wat betreft de invloed van werkwaarden op gepercipieerde beloften en psychologisch contract kenmerken leverden onze resultaten evidentie voor het bestaan van individuele verschillen in initiële psychologisch contract percepties in functie van de waarden die werknemers nastreven in hun carrière. Zo vonden we een significante invloed van het belang van vooruitgang boeken in de carrière op de algemene perceptie van werknemers- en werkgeversbeloften en op een meer relationeel psychologisch contract. Wat betreft de dimensies van werkgeversbeloften bleek deze invloed met name significant voor deze beloften die meer carrière-gerelateerd zijn (loopbaanontwikkeling, jobinhoud en financiële beloningen). Omgekeerd was er een significant negatieve invloed van de werkwaarde autonomie op de perceptie van werknemersbeloften. De invloed op de perceptie van werkgeversbeloften varieerde in functie van de inhoudsdimensie: we stelden een positieve invloed vast op beloften inzake balans werk-privé, en een negatieve invloed op beloften inzake sociale sfeer. In tegenstelling tot onze verwachting had de werkwaarde economische en materiële beloningen geen invloed op gepercipieerde beloften inzake financiële beloningen. Tenslotte vonden we een significant positieve invloed van de werkwaarde groepsgerichtheid op gepercipieerde werknemers- en werkgeversbeloften maar niet op relationele psychologisch contract kenmerken.

Ook de carrièrestrategie die werknemers willen volgen had een invloed op hun initiële psychologisch contract percepties. Werknemers die hun carrière wensten uit te bouwen in één of een beperkt aantal organisaties (i.e. een meer lokale carrièreoriëntatie) hadden significant hogere percepties van werknemers- en werkgeversbeloften en zij beschreven hun psychologisch contract bij indiensttreding ook als meer relationeel.

Werknemers die het gevoel hadden dat zij hun carrière zelf in handen hebben, scoorden eveneens significant hoger wat betreft hun initiële percepties van werknemers- en werkgeversbeloften en zij gaven een meer relationele beschrijving van hun psychologisch contract.

Tenslotte was de invloed van uitwisselingsoriëntatie minder eenduidig. Uitwisselingsideologie had een significant negatieve invloed op de perceptie van werknemersbeloften maar niet op de overige metingen van het psychologisch contract, terwijl een sterkere gerichtheid op organisatiedoelstellingen ("benevolence") ertoe leidde dat werknemers een meer relationele beschrijving van hun psychologisch contract gaven.

**Resultaten: Ontwikkeling van het Psychologisch Contract tijdens het Socialisatieproces**

In Hoofdstuk 8 bespraken we vervolgens de resultaten van onze longitudinale analyses. De hypothesen over veranderingen in psychologisch contract percepties, evaluaties en informatieverzameling werden geanalyseerd met behulp van univariate "latent growth modeling". Voor elk van de dimensies van werknemers- en werkgeversbeloften werden telkens groeicurves geschat. Deze tonen aan dat er over de tijd heen een toename was van de perceptie van zowel werknemers- als werkgeversbeloften. De evaluatie van werkgeversbijdragen en van het nakomen van werkgeversbeloften nam af voor de meeste dimensies, terwijl er een toename was van de evaluatie van eigen bijdragen en beloften. Tenslotte observeerden we tijdens de socialisatieperiode een geleidelijke vermindering van de frequentie van informatieverzameling over het psychologisch contract. Twee algemene vaststellingen waren dat er over de verschillende meetmomenten geen lineaire veranderingen optraden, hetgeen suggereert dat wijzigingen in het psychologisch contract sterker of minder sterk zijn afhankelijk van de fase in het socialisatieproces, en dat het patroon van veranderingen gedifferentieerd was naargelang de inhoudsdimensie van het psychologisch contract.

De hypothesen over de invloed van tussentijdse evaluaties van bijdragen en van het nakomen van beloften op veranderingen in gepercipieerde beloften werden geanalyseerd aan de hand van hiërarchische regressie-analyses. Uit deze analyses bleek dat nieuwkomers hun percepties van hetgeen de organisatie hen beloofd heeft aanpassen in functie van hetgeen zij daadwerkelijk ontvangen van de organisatie. Dit proces van aanpassing aan de realiteit was sterker tijdens de eerste maanden na indiensttreding ("encounter" fase) dan tijdens het tweede half jaar ("acquisition" fase). Er was slechts een beperkte invloed van de evaluatie van eigen beloften op wijzigingen in gepercipieerde werkgeversbeloften. Wat betreft de wijzigingen in werknemersbeloften stelden we ook hier een significante invloed vast van de tussentijdse evaluatie van deze beloften en van de daadwerkelijke bijdragen aan de organisatie. Ditmaal bleef deze invloed ook tijdens het tweede half jaar gelden. Daarnaast had ook de evaluatie van werkgeversbeloften een significante invloed op wijzigingen in werknemersbeloften.

De hypothesen over de invloed van informatieverzameling op psychologisch contract percepties en evaluaties werden geanalyseerd met behulp van "latent growth modeling", waarbij ditmaal conditionele en multivariate modellen werden getoetst. Deze analyses hadden enkel betrekking op de werkgeverszijde van het psychologisch contract. Uit deze resultaten bleek dat het zoeken naar informatie over wat men van de organisatie kan verwachten na één jaar leidde tot een significant positievere evaluatie van werkgeversbijdragen en –beloften voor de dimensies loopbaanontwikkeling, jobinhoud en sociale sfeer. Voor deze laatste twee dimensies had informatieverzameling ook een significant positieve invloed op de algemene evaluatie van werkgeversbeloften en van de arbeidsrelatie ("met expectations" en tevredenheid). Daarnaast stelden we ook een significante en positieve relatie vast tussen zoeken naar informatie over beloften en wijzigingen in de perceptie van deze beloften tijdens de socialisatieperiode.

**Implicaties**

In Hoofdstuk 9 bespraken we een aantal implicaties van ons onderzoek voor de theorievorming over psychologisch contract ontwikkeling en voor de managementpraktijk.

De conceptuele implicaties hadden betrekking op (1) de conceptualisering en meting van het psychologisch contract, (2) de idiosyncratische aard van het psychologisch contract, (3) het belang van wederkerigheid in het psychologisch contract, en (4) de relatie tussen psychologisch contract ontwikkeling en socialisatieprocessen.

Ten eerste deden we in dit onderzoek een actieve poging om het psychologisch contract te definiëren en te operationaliseren als een construct dat drie facetten heeft, namen we het centrale element "beloften" consistent op in onze metingen, beschouwden we zowel de bijdragen van werknemers als van werkgevers als onderdeel van het psychologisch contract en ontwikkelden we een meetinstrument waarbij meerdere dimensies werden gehanteerd voor het meten van werknemers- en werkgeversbijdragen.

Ten tweede toonden we aan dat het psychologisch contract een inherent subjectief gegeven is en dat subjectiviteit niet enkel een rol speelt in de relatie tussen psychologisch contract evaluaties en uitkomsten, maar ook bij de totstandkoming van het psychologisch contract. Zowel de significante invloed van individuele factoren, de subjectieve mechanismen die veranderingen in psychologisch percepties verklaren en de rol van informatieverzameling leverden meer inzicht op in de subjectiviteit van psychologisch contract percepties.

Ten derde leverde ons onderzoek verdere evidentie voor het belang van wederkerigheid in psychologisch contract percepties en bevestigden we de conceptualisering van het psychologisch contract als een uitwisselingsconstruct. Dit bleek zowel uit de invloed van individuele factoren die te maken hebben met de individuele normen van werknemers ten opzichte van uitwisselingssituaties als uit de invloed van de evaluatie van organisatiebeloften en de perceptie van organisatiebijdragen op daaropvolgende veranderingen in de perceptie van werknemersbeloften. Onze resultaten suggereerden tegelijk ook dat uitwisseling belangrijker is in het bepalen van veranderingen in de perceptie van werknemersbeloften dan in de perceptie van werkgeversbeloften.

Ten vierde toonden we aan dat het relevant is om bij de studie van psychologisch contract ontwikkeling bij nieuwkomers rekening te houden met de inzichten die binnen de socialisatieliteratuur werden ontwikkeld. Dit blijkt ondermeer uit de differentiële veranderingen tijdens de twee centrale socialisatiefases die we in ons onderzoek beschouwden ("encounter" en "acquisition"), uit het feit dat wijzigingen in gepercipieerde beloften een proces van aanpassing aan de realiteit weerspiegelen en uit de invloed van informatieverzameling op psychologisch contract evaluaties en meer algemene evaluaties van de arbeidsrelatie na afloop van de socialisatieperiode.

In Hoofdstuk 9 beschreven we ook een aantal implicaties van onze resultaten voor de managementpraktijk. Algemeen toonden ze aan dat het voor managers van belang is om zich bewust te zijn van de subjectieve percepties waarmee werknemers de organisatie betreden en van de subtiele invloeden die individuele factoren en ervaringen binnen de organisatie uitoefenen op deze percepties. Zowel de recruteringsfase als de socialisatieperiode vormen voor de organisatie momenten bij uitstek om actief aandacht te besteden aan deze percepties door wederzijdse verwachtingen meer expliciet te maken en op die wijze de ruimte voor individuele interpretaties die niet stroken met de organisatierealiteit, te beperken.

**Beperkingen en Suggesties voor Toekomstig Onderzoek**

Bij de interpretatie van de resultaten van dit onderzoek dienen een aantal beperkingen in acht te worden genomen. Deze werden beschreven in Hoofdstuk 9. Ten eerste hielden we in ons onderzoek enkel rekening met het perspectief van de nieuwkomer. Om een vollediger beeld te verkrijgen van de dynamiek van het psychologisch contract dient ook het perspectief van de werkgever, als de andere partij, te worden bevraagd. De multidimensionele meting van de inhoud en evaluatie van het psychologisch contract is een belangrijke bijdrage aan bestaande operationaliseringen maar tegelijk is het mogelijk dat er nog andere inhoudsdimensies zijn die relevant zijn voor werknemers en/of werkgevers. Tenslotte werden de kenmerken van het psychologisch contract

slechts unidimensioneel gemeten; ook hiervoor is het beter om meerdere dimensies in rekening te brengen in toekomstig onderzoek.

Ten tweede was het, gezien het gebrek aan kennis over de ontwikkeling van het psychologisch contract, onmogelijk om in dit onderzoek een exhaustief model te toetsen dat alle relevante antecedenten omvatte. De selectie van antecedenten voor onze eerste onderzoeksvraag gebeurde op basis van een diepgaand literatuuronderzoek, maar het is mogelijk dat er nog andere factoren zijn die het geheel van onze bevindingen zouden hebben beïnvloed. Ook de focus op individuele antecedenten was een noodzakelijke beperking maar verschaft in die zin geen volledig antwoord op de vraag welke factoren het psychologisch contract beïnvloeden.

Ten derde zijn er een aantal nadelen verbonden aan het gebruik van een longitudinaal onderzoeksdesign. Dit design heeft als voordeel dat causale verbanden en relaties over de tijd heen kunnen worden onderzocht, maar heeft onvermijdelijk ook te kampen met de uitval van respondenten en deelname-effecten. Het uitvalpercentage in ons onderzoek was vergelijkbaar met ander longitudinaal onderzoek en de statistische tests voor "attrition bias" suggereerden geen systematische verstoringen in antwoordpatronen, maar andere invloeden zoals het nastreven van consistentie of verveling konden we niet onder controle houden. Ook het feit dat de ontwikkeling van het psychologisch contract tijdens het socialisatieproces enkel werd onderzocht op basis van de respondenten die aan het volledige onderzoek meewerkten, beperkt de veralgemeenbaarheid van onze resultaten. De invloed van economische wijzigingen tijdens de loop van het onderzoek dient eveneens te worden vermeld, met name de verslechterde economische conjunctuur. Deze wijzigingen hebben wellicht niet enkel een invloed gehad op de uitval van respondenten maar ook op het antwoordpatroon van diegenen die aan het onderzoek bleven deelnemen. Om de externe validiteit van onze resultaten te toetsen is het daarom van belang om meerdere cohorten van nieuwkomers te volgen.

Ten vierde is er het gebruik van zelfrapporteringen, die het risico van "common method bias" en sociaal wenselijk antwoorden met zich meebrengen. In toekomstig onderzoek is het daarom aangewezen om ook andere bronnen in het onderzoek op te nemen zoals directe chefs of meer objectieve performantiemetingen.

Ten vijfde werd dit onderzoek niet uitgevoerd bij een representatieve steekproef van werknemers. Het gaat hier enkel om hoger opgeleiden afkomstig uit grote, dienstverlenende bedrijven en de resultaten dienen dus tot deze groep beperkt te blijven. Cross-validering van onze bevindingen is nodig om na te gaan of de resultaten ook gelden voor andere onderzoekspopulaties.

Deze beperkingen suggereren meerdere richtingen voor toekomstig onderzoek: (1) de meting van andere antecedenten van het psychologisch contract en andere factoren die het proces van psychologisch contract ontwikkeling beïnvloeden; (2) het gebruik van andere tijdspannes (kortere opvolging tijdens de socialisatieperiode of meerdere metingen na afloop van de socialisatieperiode); (3) het integreren van het organisatieperspectief op het psychologisch contract; (4) verder onderzoek naar de rol van informatieverzameling.